



Equator Principles Due Diligence Review

Violations by Barrick Gold's

Pascua Lama Project (Argentina & Chile)

Argentina/Chile

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To potential Equator Principles Signatory Banks considering financing
Barrick Gold's Pascua Lama and/or Veladero projects

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Adherents:

The following organizations adhere to the statements and conclusions presented in this *Equator Principles Due Diligence Review*.

Any errors which may be contained in this review are the sole responsibility of CEDHA.

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Foreword

The following *due diligence review* on Barrick Gold's Pascua Lama and Veladero projects is based on extensive publicly available evidence. The review outlines areas where Barrick Gold's mining operations, in Argentina and Chile, particularly at the Pascua Lama gold project (set to commence in the near future), but also at the adjacent and related Veladero project which has been in operation for several years, fail to comply with the social and environmental norms established by the [Equator Principles](#) to which many of the world's largest financial institutions adhere.

Banks that have signed on to the [Equator Principles](#) have supported Barrick Gold in the past despite the company's poor track record in many visible and highly controversial projects around the world, such as in Tanzania, Papua New Guinea, the United States, and in Australia. These projects have led to *severe* environmental and social impact and have resulted, for example, in public institutions such as the Ethics Council of Norway to withdraw investments in Barrick's operations.¹

Information surfacing about environmental design flaws as well as numerous cases of social impacts, and complete disregard for stakeholder views, *including indigenous peoples* affected by the Pascua Lama project, represent violations of national and international law, as well as of industry norms and standards, and make the Pascua Lama project (now in a preparatory phase) as well as the Veladero project (already in implementation), *incompatible* with the social and environmental objectives that have been established to promote responsible investment in the [Equator Principles](#).

Considering Barrick's sordid history relative to social and environmental due diligence, and its poor compliance history of basic minimum social and environmental standards around the world, lending support to this project would imply ignoring the standards established by [Equator Principles](#) for responsible investment. Before Barrick can approach any Equator Principles signatory bank, the company needs to correct its' systematic failure to meet basic social and environmental due diligence obligations. We believe that a review of Barrick's Pascua Lama project for due diligence compliance, by financial institutions considering support, will be sobering and can only reveal a company that makes hollow commitments to the financial institutions at which it seeks support, only to shirk its obligations once loans are disbursed.

Due to space constraint, and considering the imminent need to inform certain financial institutions, particularly *Export Development Canada (EDC)* and the *US Export Import Bank (Exim Bank)*, which are considering providing financing to Barrick Gold for the Pascua Lama project, not all details of the cited evidence is presented. Numerous links *are* provided to the original sources of the information, and evidence cited in the cases where we have not compiled it. CEDHA can also provide the reader with any and all further information and evidence that may be necessary on any of these points raised. CEDHA strongly encourages both EDC and Exim Bank to contact the actors mentioned in this report, many of which have researched and compiled information and evidence to sustain the many social and environmental complaints that have already been filed against Barrick Gold's Pascua Lama and Veladero projects presented here.

¹ See: <http://www.miningwatch.ca/norwegian-pension-fund-excludes-barrick-gold-ethical-grounds>

1

Se utilizarán excavadoras hidráulicas para cargar el hielo directamente en camiones.

2

Estos camiones lo transportarán a un depósito en el glaciar Guanaco, aproximadamente a cuatro kilómetros de distancia.

3

Al llegar al glaciar, los camiones descargarán el hielo directamente en el depósito, que se encuentra preparado para su conservación.

4

Una vez ahí, las cortinas para nieve lograrán que los bloques de hielo formen una masa continua.

BARRICK
Minería Responsable

Images offered in a brochure by Barrick showing plans of glacier destruction and removal by bulldozer and dynamite

Executive Summary

This report reveals serious project design and implementation flaws of Barrick's Pascua Lama Project, making this project non-compliant with the principles and minimum social and environmental standards established by the [Equator Principles](#). This conclusion is based on the analysis of a number of issues and dimensions of both the Pascua Lama and adjacent Veladero projects, which are intricately related, including Barrick's impacts and problems related to:

- Glaciers
- Waterways
- Indigenous rights
- Wetland systems (vegas systems)
- Project design (such as faults in rock pile design and execution)
- Non-compliance of, and attack on, environmental legislation
- Transparency and disclosure
- Corporate culture
- And multiple other issues.

Barrick Gold fails to comply with any of the specific principles established in the [Equator Principles](#). It is our recommendation that EDC and Exim Bank reject Barrick's application for financing support for its Pascua Lama and/or Veladero projects. If consideration of financing is to proceed, EDC and EXIM Bank should carefully review due diligence compliance of Barrick's operations, and carry out extensive consultations with the many actors and sources of information, including public agencies such as the *Argentine National Park Services*, which has produced extensive documentation about the social, economic and environmental impacts caused by and still to occur by Barrick's activities related to these projects.

Background on Barrick Gold's Pascua Lama and Veladero Projects.

Pascua Lama

From Barrick's Website:

<http://www.barrick.com/GlobalOperations/SouthAmerica/PascuaLamaProject/default.aspx>

The Pascua-Lama project is located on the border of Chile and Argentina, ... at an elevation of 3,800 to 5,200 meters, approximately 10 kilometers from Barrick's Veladero mine. As of December 31, 2010, Pascua-Lama has proven and probable reserves of 17.8 million ounces of gold, with 671 million ounces of silver contained within the gold reserves¹. Expected average annual gold production is 800,000–850,000 ounces in the first full five years of operation at negative total cash costs of \$225-\$275 per ounce^{2,3} assuming a silver price of \$25 per ounce. Average annual silver production for the first full five years is expected to be about 35 million ounces. Pre-production capital is expected to be \$4.7-\$5.0 billion², of which approximately 50% has been committed at the end of the third quarter. In Chile, earthworks are about 80% complete. In Argentina, ... earthworks ... are approximately 60% complete. Civil concrete works continue for the structures at the stockpile, grinding and pebble crusher areas, and have started in the Merrill Crowe process plant area.

Veladero

From Barrick's Website:

<http://www.barrick.com/GlobalOperations/SouthAmerica/Veladero/default.aspx>

The Veladero mine is located in San Juan Province of Argentina, immediately to the south of the Pascua-Lama property The property is located at elevations of 4,000 and 4,850 metres above sea level, approximately 374 kilometres northwest of the city of San Juan. Veladero is a conventional open-pit operation where ore is crushed by a two-stage crushing process and transported via overland conveyor and trucks to the leach pad area. Run-of-mine ore is trucked directly to the valley-fill leach pad. In 2010, Veladero produced 1.12 million ounces of gold at total cash costs of \$256 per ounce¹. Proven and probable mineral reserves as of December 31, 2010 was 11.3 million ounces of gold².

Problems manifest by and at Pascua Lama and Veladero.

From the onset of Barrick's appearance in the mid 1990s in Argentina and in Chile to develop the world's first bi-national project, and since operations at Veladero began in the mid 2000s, Barrick's operations have been [surrounded by controversy](#) despite Barrick's [false statement](#) on its website that the project "has strong support from local citizens and regional stakeholders in both countries".

The evidence to the contrary is ample and overwhelming, and continues to mount as preparations for Pascua Lama advance. A simple Google Search of the words "Pascua Lama", results in 7 of 10 hits on the first visible screen, (or 70%) which are about *conflict and environmental degradation*. This is hardly indicative of a project that is in harmony with interested stakeholders, and much less one with *strong public support*, as Barrick suggests to its potential investors and to the public.

A number of publicly and very well documented conflicts have arisen from both projects, while others are now beginning to surface, as information slowly becomes more accessible to concerned stakeholders and as concerned groups begin to organize and share information about these incidents.

Perhaps one of the most telling opinions debunking Barrick's myth of public support, is that of the World Bank's International Finance Corporation (IFC), which states in a recent report, "The Plans of Canadian mining giant Barrick Gold Corporation to exploit gold, silver and copper reserves at Pascua Lama in Chile have been **severely affected by community opposition**". The project is located in the high Andes, near glaciers that provide drinking water and irrigation water to downstream communities in the Huasco Valley, where agriculture is the main source of livelihood".³

The principle concerns from stakeholders, *but by no means the sole concerns*, have been centered on:

- Glacier impacts;
- Vegas (mountain wetlands) impacts;
- Impacts to indigenous peoples' lands;
- Impacts to an internationally protected area (the San Guillermo Biosphere Reserve);
- Risks to water supply from contamination and overuse;
- The limited social/economic benefits of the project to the local economy;

Below we provide several media links to articles, videos, and television programs that have appeared in local and international press, debunking the idea that Barrick has *strong public support* for Pascua Lama.

1. Local community concerns in Chile regarding expected impacts to local environmental resources, particularly glaciers and water quality; (see: the following sample historic press articles:; [a](#)), [b](#)) [c](#))
2. [Concerns over Barrick's intension to dynamite glaciers and move them](#) (see image above showing a cartoon depiction and brochure as well as Barrick's frankly [unbelievable glacier destruction plan](#) which indicates that glaciers will be blasted and bulldozed away in order to clear ice away with the unexplainable objective of "to protect the environment");
3. [Concerns from indigenous peoples with ancestral lands in Pascua Lama's impact area](#) and resulting law suit at the Inter-American Commission on Human Rights for impacts to indigenous rights;

² Emphasis added

³ See:

[http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/p_ClimateRiskandFIsFullreport/\\$FILE/IFCClimate_RiskandFIs_FullReport.pdf](http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/p_ClimateRiskandFIsFullreport/$FILE/IFCClimate_RiskandFIs_FullReport.pdf) - (p.50)

4. [Concerns over Pascua Lama's and Veladero's impacts to a vulnerable environmental reserve \(the San Guillermo Biosphere Reserve in Argentina\)](#); (see also [report by Argentina's National Park Service](#));
5. [Concerns over Pascua Lama's impacts to glaciers and water resources in Argentina, specifically to glaciers such as the Coconta, Toro 1, and other glaciers, which have already been partially or entirely destroyed by Veladero and Pascua Lama](#); these are two of more than 150 glaciers or glacial ice formations in the project vicinity (in a glacier impact study carried out for Barrick, which is often cited by Barrick and by provincial authorities in Argentina, only 6 glaciers are covered) that have been impacted or are at risk;
6. [Concerns over other environmental impacts by Pascua Lama and Veladero to highland wetlands \(vegas ecosystems\)](#);
7. [Concerns over the secrecy around financial agreements of the Pascua Lama project](#);
8. [Concerns over the political influence wielded by Barrick gold over local and national public officials](#);

Since Barrick Gold's launch of activity in preparations for Pascua Lama, and prior to this at its Veladero site in Argentina which is already in full operation, there has been heightened concern and conflict around *every one of these points*, in some cases leading to specific legal or extrajudicial action presented by stakeholders before local and international access to justice authorities. In others, conflicts have been evolving and growing as Barrick advances with its Pascua Lama project.

In other cases, complaints from stakeholders have been silenced, severely criticized, entirely dismissed, or worse, *simply ignored* by Barrick Gold. The company has had to include a [long list of dismissals](#) of the endless claims presented against its projects, including the dismissal of reports by public authorities, such as the Argentine National Park Service which has expressed a long list of concerns regarding diverse impacts by Barrick's Pascua Lama to glaciers, flora, fauna, water ways and communities downstream. This counters the idea that Barrick has achieved *strong support* from the public. The company generally answers these claims by saying impacts are insignificant, or by countering with the argument that Barrick is a responsible company subscribing to the highest international standards such as ISO, etc.

The company never, *or rarely*, engages with substantiated critiques, and generally only to attack these in the public sphere or Barrick develops showy [philanthropic CSR activity](#) to counter or offset these impacts. An example is Barrick's Vegas Protection Program (mountain wetlands) which attempts to offset criticism many environmental groups as well as that of public authorities (such as the Argentine National Park Services) have made due to Barrick's *total destruction* of highly sensitive vegas ecosystems (mountain wetlands) drowned under its leach pad valley waste site for its Veladero mine. In early stages of project preparation, Barrick proposed the surprising and *frankly absurd* plan to *transplant* existing ecologically sensitive wetlands, by literally *cutting out* mountain grass in small patches from the moist and ecologically rich earth, and transferring them to alternative sites. This preposterous plan mirrors Barrick's [similar response to get past glaciers](#) sitting over lucrative gold mineral deposits. In this other *hard-to-believe plan*, Barrick proposed to *dynamite glaciers and haul them off in dump trucks (like waste) to alternate sites*, suggesting that this would "protect the environment". We've included an English translation of this plan as an annex to this document. While this plan caused outrage amongst community groups and indigenous peoples, and was nixed by Chilean authorities, it serves to remind us how this company thinks and operates.

In regards to the vegas/wetlands drowned by cyanide contamination in Veladero's leach pad valley, one public figure in Argentina, who does not want their identity revealed, referred to Barrick's destruction of *vegas systems at Veladero* at their principal lixiviation site, as "*Argentina's environmental sacrifice to Barrick*".

Each section of this report addresses some of the main concerns and/or complaints presented by numerous unrelated sources, which have been *formally* presented to judicial or extra-judicial forums.

Glacier Impacts

The Pascua Lama project is nestled amongst sensitive glaciers of the high Andes mountains of Chile and Argentina. Below is an image taken from Google Earth of the Pascua Lama project site with numerous glaciers identified around the project. The purple polygons are the project pits on each side of the border. The red polygons are waste dump sites. The thin yellow line (barely visible) running diagonally is the border between Argentina and Chile (Argentina is in the upper right quadrant of this image). The orange line marks an underground tunnel constructed to transport extracted rock from Chile to Argentina to be treated at the leach pad valley. Barrick's Veladero project is visible in the extreme upper right corner, and is literally adjacent to Pascua Lama. We can see massive white uncovered glaciers on both sides of, and adjacent to, the project site.



Barrick's Pascua Lama Project visibly surrounded by glaciers and perennial ice on all sides.

Barrick has systematically denied impacts by Veladero and Pascua Lama to the region's glaciers. In fact, when communities began to question Barrick's Pascua Lama project for environmental impact to glaciers, Barrick first argued that they were not technically glaciers but "glacierets"; [such arguments are still on Barrick's website](#) today; below is the actual picture and text to this effect, on Barrick's website regarding some of the more controversial impacts to glaciers. In this particular case, the glaciers are sitting on top of gold reserves which makes their impacts extremely controversial with stakeholders and government. ***The caption text belongs to Barrick.***



Abajo: esta ilustración muestra por qué estos cuerpos de hielo han sido clasificados por glaciólogos como glacierets o reservorios de agua, en vez de glaciares. Una de sus características es que sus aportes de agua al Valle de Huasco son insignificantes

The translation of this picture legend reveals Barrick's attitude towards the glacier reserves in the region (Barrick affirms that these glaciers have *insignificant* value to the communities which depend on their water provision). The legend reads (in Barrick's own words):

This illustration shows why these bodies of ice have been classified by glaciologists as glacierets or water reserves, instead of glaciers. One of their characteristics is that their provision of water to the Huasco Valley are insignificant.

It's at the very least ironic that Barrick states glaciologists call these "water reserves", but then says that "their provision of water are insignificant".

[The Argentine national Park Service has also expressed its concerns](#)⁴ over Barrick's impacts to glaciers primarily because these glaciers feed sensitive national park areas, such as the San Guillermo Biosphere Reserve (SGBR)—see section below on Impacts to the San Guillermo Biosphere Reserve. The Park Service draws attention to several impacts of mining projects in the region but centers on the Pascua Lama project as the main focus of concern. One of the many issues addressed is the potential harm caused on the hydrological system due to the many impacts of mining activity, including the continuous deposit of dust from the extractive process and project road use on glacier surfaces, leading to accelerated glacier melt.⁵ This impact to glaciers by Pascua Lama, in turn places stress on the reserve's water intake.

As pressure grew against Barrick's proposal to dynamite and move glaciers, Barrick began to change its discourse towards glaciers, and finally had to both admit the presence of glaciers as well as not to destroy them. Instead it plans to dig underneath the glaciers that are in the way of mineral deposits. No information is available, however, concerning the impacts of explosions and excavation underneath the glaciers, to delicate glacier stability, which could lead to a collapse of the ice structure. It is known that the weight exerted by glaciers on the earth is enormous, and as they recede, the earth lifts. We do not have enough information to determine what impacts may be caused by excavating beneath this weight.

The company today provides a series of reports on glacier monitoring at the Veladero site, adjacent to Pascua Lama, of merely a handful of the more than 150 glaciers in the project vicinity.

One of these reports, produced in 2006 claims that Pascua Lama will have a *negligible* impact on the glaciers in the project vicinity. This report (by [Espizua, 2006](#)) is widely cited by local government

⁴ See: <http://wp.cedha.net/wp-content/uploads/2011/11/Plan-de-Manejo-del-Parque-Nacional-San-Guillermo-y-Propuesta-de-ManejoArgentina.pdf>, p. 46-47

⁵ <http://wp.cedha.net/wp-content/uploads/2011/11/Plan-de-Manejo-del-Parque-Nacional-San-Guillermo-y-Propuesta-de-ManejoArgentina.pdf>, p.18

authorities supporting the Pascua Lama project. What is not understood by most is that *the report only looked at 6 glaciers* and select patches, in a very limited geographical area (10km by 10km, or 100 km²) immediately adjacent to the project. (Espizua, 2006, p.11) The report *does not* consider glaciers, rock glaciers, perennial ice and permafrost zones in the *entire* project area, which is many times larger than this delimited study area. If we consider the actual project area (approximately 40kmX40km), plus 0.5km on either side of the access road leading up to the project from the entry point to the road at Tudcum, San Juan, 180km away, the actual *total* area of influence where glaciers and other ice reserves are at risk, and have already been impacted, is approximately 1700 km², or *17 times* larger than the area studied by Espizua.

The glacier inventory we've carried out for the Pascua Lama project, which mirrors other independent studies, reveals approximately 150 glaciers or ice reserves in this greater area (not the 6 mentioned by the Espizua report).

Below is an aerial snapshot of our glacier inventory. The yellow oval is the project's immediate area of influence. The glaciers from the inventory are marked by blue polygons. We note that this snapshot *does not* include glaciers along the 180 km access road on the Argentine side of the border (the right side in the image).



Our glacier inventory reveals 150+ glaciers/perennial ice far exceeding the 6 reported by Barrick

The next image is a picture of one of these glaciers (adjacent to the Diaguita indigenous peoples territory), a rock glacier impacted by one of Barrick's exploratory roads at Pascua Lama. The image can be easily seen on Google Earth by copying and pasting the following address in the Google Earth search engine:

[29°09'53.75" S 70°01'03.30" W](https://www.google.com/maps/@29.1491944,-70.0210833,15z)



Rock Glacier impacted by Pascua Lama's road at border with Diaguita indigenous lands

This rock glacier is a body of ice mixed with rock (containing some 50-90% ice volume) slowly creeping down the mountain side, it is outlined in blue for identification. We can see Barrick's mining road zigzagging up the glacier body and continuing on over the mountain ridge. Building a road through a glacier is obviously not good environmental stewardship, nor does it make much sense even from an economic or safety perspective, as the moving ice and rock is likely to destroy the road over time. This produces safety hazards for anyone using the road, as well as increased maintenance costs, as the road is continuously destroyed by the moving body. For the glacier, however, the impacts could be fatal, as the road and road maintenance is likely to alter the water flow into the ice structure, as well as destabilize the structure's balance, and hence, destroy the glacier in time. Our analysis shows many such instances of incompatibility with Barrick's mining activity and glaciers, rock glaciers, and permafrost zones.

A word is in order on exactly what a rock glacier is, as some mining actors, including Barrick have downplayed the relevance of different types of ice forms, suggesting that they are "insignificant" in terms of water supply. This is simply false. Extensive academia covers the essence of rock glaciers, indicating that they are in many cases identical in dynamics to normal uncovered white glaciers. In fact, what is most important to understand is that rock glaciers and debris-covered glaciers are actually more important any many times much more vulnerable than ordinary glaciers. Their rock cover helps preserve the ice from high temperatures, which means that they protect water reserves at higher temperatures than uncovered glaciers, but that also, they can survive at lower altitudes, greatly increasing the ice/water reserve in this very arid part of the world. Rock glaciers and debris-covered glaciers are a fascinating adaptation of mother nature to conserve ice where water is most needed!

Below is an image of a typical rock glacier in San Juan province.



Typical rock glacier of San Juan, note NO ice is visible in this rock covered glacier

The next image shows a debris-covered glacier in San Juan, with a collapsed wall, revealing an enormous quantity of ice many meters thick, below the debris cover.



Massive ice content underneath typical debris-covered rock glaciers in San Juan.

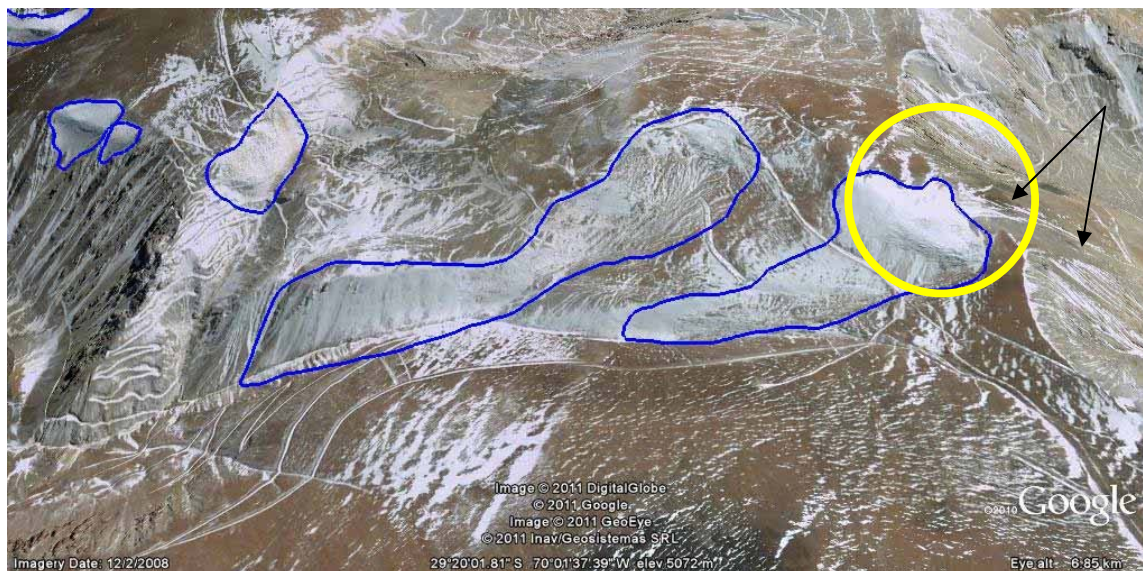
Seen from above, a rock glacier like this one, might not reveal any ice, and to the common bystander, they may never know that a glacier exists at this site. See the picture below where a glacier is clearly present despite the total lack of visible ice.



San Juan rock glacier with NO ice visible

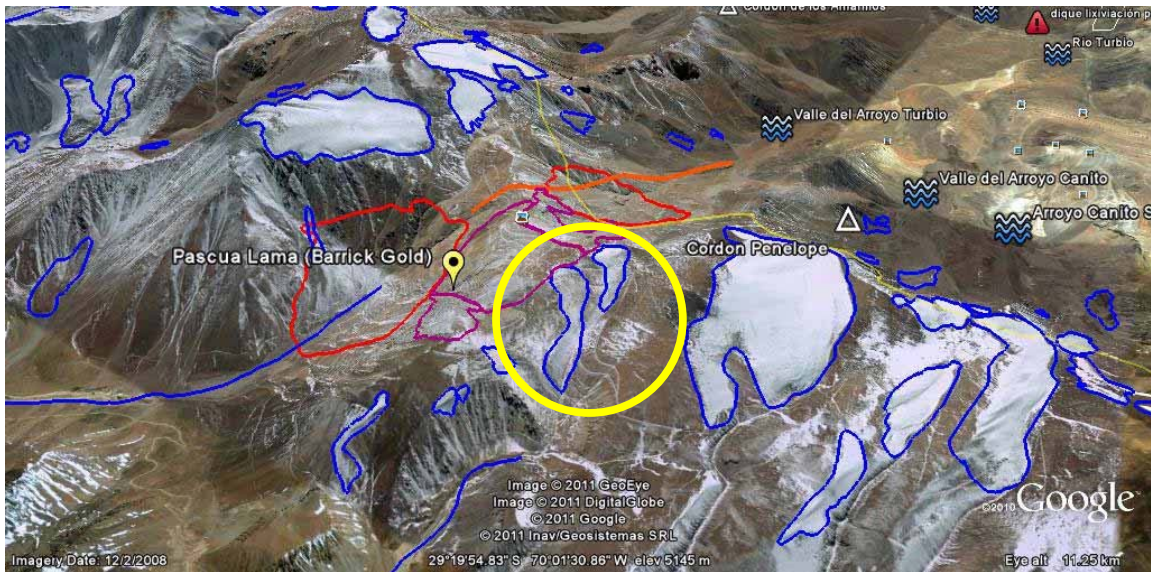
The image below shows again, mining roads at Pascua Lama indiscriminately entering and existing glaciers. The glaciers at the center of this image, stretching diagonally towards the upper right corner, named Toro 1 and Toro 2, have been heavily impacted by the Pascua Lama project. There are several documents which have appeared in the public domain referencing Pascua Lama's impacts to these two glaciers in particular.

See Google Earth: 29°19'56.80" S 70°01'23.20" W



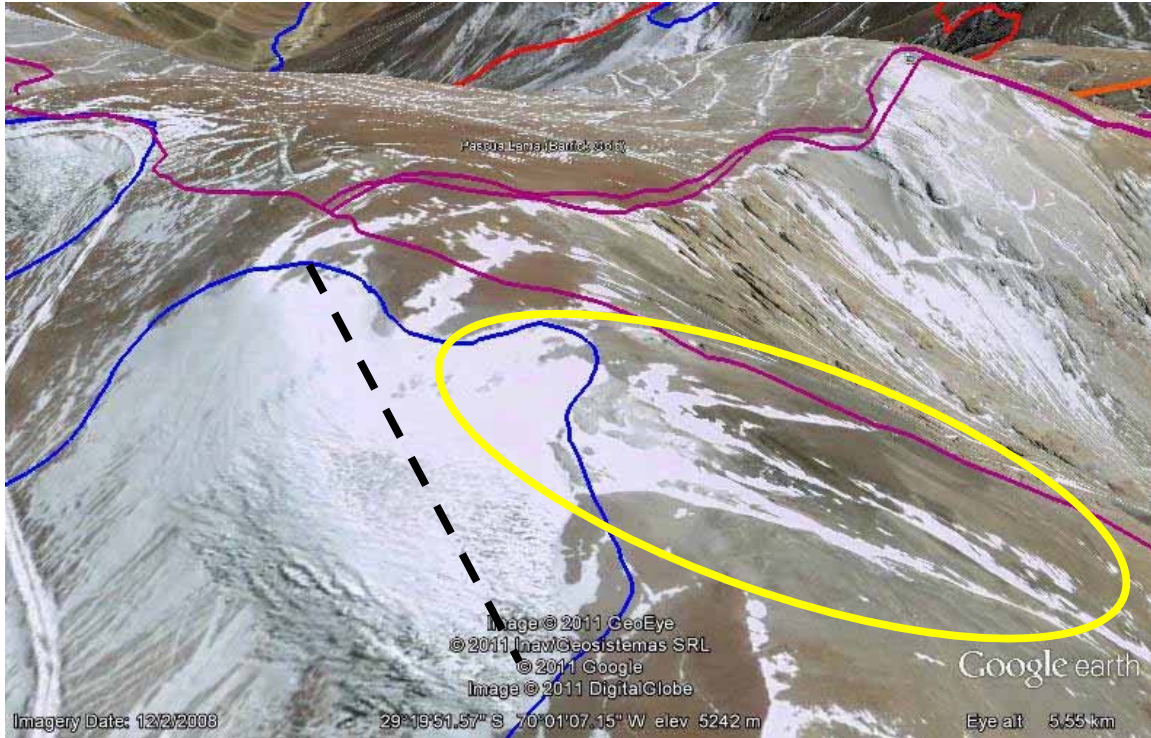
Gold reserves are below Toro 1/Toro 2 glaciers; arrows indicate water runoff into Argentina

Note the yellow circle in this last image. This is on Toro 1, which sits on the border of Argentina and Chile. The problem for Barrick regarding these glaciers, is that significant gold reserves lie underneath (which implies that Barrick has already drilled extensively into these glaciers to take samples). In a first attempt at getting at the gold, Barrick's answer was to get rid of the glaciers, that is, dynamite them. If we go back to the image showing the project area, we see that Toro 1 and Toro 2 are right at the pit sites. Notice the purple and red polygons, which are pit and rock waste pile sites, respectively.



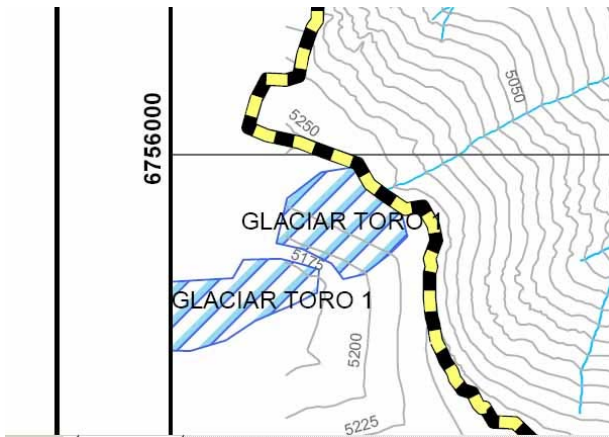
Toro 1 and Toro 2 Glaciers sit on mineral reserves and are adjacent to pit and rock pile.

But today, new unpublished concerns have surfaced. [A recently revealed report](#) addressed publicly for the first time in this review, indicates that Toro 1 has been mapped incorrectly. Barrick situates the Toro 1 glacier entirely in Chile. However, this glacier actually straddles the border, with some 20% or more of the ice volume in Argentina, and subsequently Toro 1 partially discharges towards Argentina. The black arrows in the first image above of Toro 1 indicate the water discharge flowing downhill into Argentina. The border between Argentina and Chile is formed by the watershed division line, which in this case, clearly runs through the middle of the Toro 1 glacier. Below is an amplified image of the Toro 1 glacier, note the yellow oval which shows the water flow from Toro 1 moving downhill into Argentina. The black dotted line marks the approximate (corrected) border.



Toro 1 Glacier is mapped by Barrick in Chile, image shows glacier partially in Argentina

If we consult Barrick's mapping of glaciers around Pascua Lama, we find Toro 1 entirely in Chile. Below is an amplified view of a table TO2.13 taken from Barrick's Environmental Impact Study.



Barrick's Incorrectly Maps Toro 1 solely in Chile

The yellow/black dotted line is the border, Argentina on the right side, Chile on the left. As is clear from the image, Toro 1 is mapped entirely in Chile. If it were true that Toro 1 was entirely in Chile, because the border is formed by the highest peaks in combination with the watershed, it would be impossible that *any water* from Toro 1 would flow towards Argentina. The only explanation of the evidence of water flow into Argentina which is clear from the Google Earth image, is that the highest peak (the watershed) is somewhere in the middle of Toro 1. Toro 1 is hence, partially in Argentina.

The error may seem trivial but in fact, it leads to several points of serious concern and eventual conflict between two sovereign States. One, the company has incorrectly divided mineral resources in the map, and we can presume as well, that the company has miscalculated water discharge

directional flows leading to miscalculations in terms of water flow and impact to the surrounding environment. We are further concerned because the appropriate environmental and other controlling authorities in Argentina, for example, have accepted the EIAs as they are and hence do not have this glacier on their control agenda.

Finally, if Barrick has committed such a gross oversight regarding Toro 1, what are we to expect with the rest of its analysis, particularly when the studies shown by Barrick on glacier impacts refer to merely 6 glaciers, when there are clearly some 150 glaciers in their impact zone? Can we trust Barrick's data regarding Barrick's estimates on other aspects of glaciers impacts of operations? Clearly not.

A [complaint](#) was lodged recently at the Argentine foreign ministry by the scientist that discovered this gross error. It is currently being reviewed by the appropriate office at the Argentine Foreign Ministry.

[The San Guillermo Biosphere Reserve](#)

The San Guillermo Biosphere Reserve (SGBR), comprising 990,000 hectares, is one of the Andes Mountain's most sensitive and pristine natural areas, a thriving ecological micro-region, home to diverse migrating species such as condors, vicuñas, llamas, pumas, flamencos and many others. The reserve is rich in highland wetland systems (vegas ecosystems), which are high grasslands, and an array of precious flora and fauna. The SGBR also contains rich archeological indigenous sites and relics, remnants of ancient indigenous villages.



This reserve is a UNESCO-protected site and is managed in Argentina by the National Park Service (NPS). The NPS has repeatedly expressed serious concerns over mining activity coming to the region and has specifically pointed to the Pascua Lama project, which is in conflict with the protected SGBR. The park service says in a recent report (the Draft Biosphere Management Plan):

“One of the most worrisome environmental aspects [of mining activity in the area, including Veladero and Pascua Lama] is the use of water by these projects. Of particular concern considering the SGBR is that it is at the head of the Rio Jachal River Basin, ... and that this basin depends on the biodiversity of the area ... and as such, considering the Environmental Impact Assessment of Pascua Lama, from the point of view of water, ... the principal concern regarding the impacts to the hydrological system, ... depend on:

[summarized]

- a) riverside ecosystems;
- b) vegas [mountain wetlands] systems and downstream river discharge;
- c) impacts on vegas and subsequent degradation on fauna;
- d) impacts on vegas and subsequent impact on game;
- e) impacts on communities downstream
- f) visual impacts
- g) impacts on subterranean waters
- h) region becoming more arid

One of the main points of conflict with the park service, is the location of the reserve, *vis a vis* Barrick's Pascua Lama project. As well as to what extent mining activity will impact the reserve.

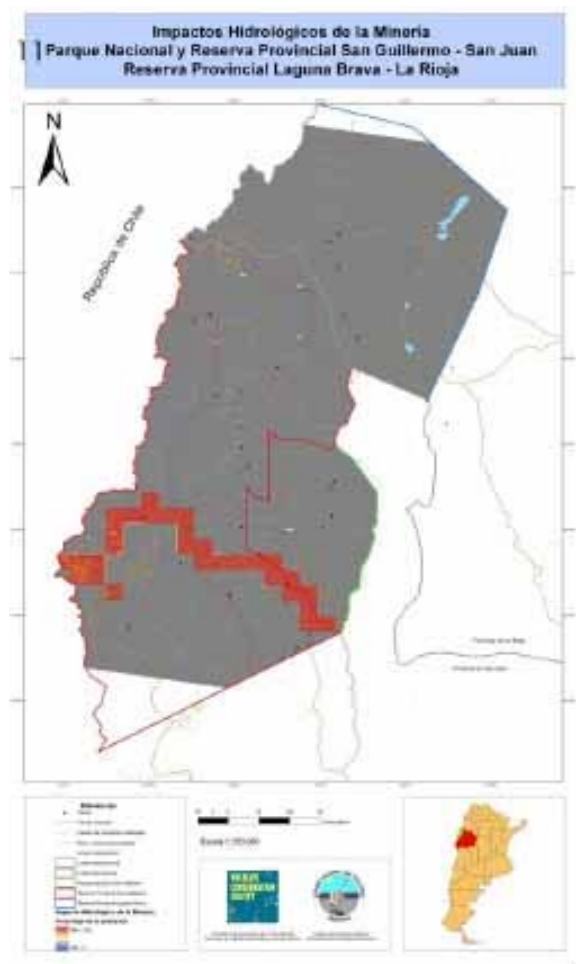
Barrick's Pascua Lama project, despite what the company has said repeatedly, is entirely within the SGBR, and the impacts both in terms of impacts to vegetation as well as to wildlife and to water supply are critical.

Barrick uses nuances about reserve categories to suggest that its operations are not inside the reserve. Here is the text from [Barrick website](#),

(unofficial translation from Spanish)

A biosphere reserve is created to reconcile the preservation of biodiversity and of sustainable resources. The mining project installations of Pascua Lama in Argentina are in the campo de Las Taguas outside the San Guillermo Biosphere Reserve.

The following map shows the SGBR, according to the National Park Service, in a table outlining mining impacts to hydrological resources of the reserve. The reader can obtain this map from the National Park Service, or from the [following link](#) we've facilitated on our website. Notice that the SGBR extends to the Chilean border and that the mining impacts that are highlighted in red, stem directly from Barrick's Veladero and Pascua Lama project area.



NPS map reveals Pascua Lama water impact

Barrick also employs legal nuances about what it has to comply with and what it does not. In relation to its impacts to the SGBR, Barrick says that "there is NO provincial, national or

international norm that prohibits mining in the multiple use transition area of the SGBR”.⁶ Also, that “adherence to the UNESCO MAB program on Man and Biosphere does not imply a legal obligation” (IBID, p. 5) The cited document also refers on page 5 to the need to create the Biosphere Management Plan between the actors involved, and that this would help sort out the issues of contention.

The [document we cited previously from the National Park Service](#), outlining the many concerns over mining impacts to the SGBR, *is precisely the advanced draft of that plan*, which has yet to be finalized because of controversy between the NPS and pro-mining public agencies which are attempting to take jurisdiction away from the NPS over the reserve. The NPS nonetheless has already gone public with many irreversible impacts Barrick’s projects will have on the reserve.

We invite the reader, and particularly those reviewing Barrick’s due diligence with the Equator Principles, to consult with the Argentine National Park Services to get a full sense of just what the impacts to the San Guillermo Biosphere Reserve are and will be from Barrick’s mining activity in the region.

⁶ See: Proyecto Pascua Lama Informe de Impacto Ambiental. Texto Complementario Sección 4.0 – Respuesta a Subsecretario de Recursos Naturales, Normativa Investigación, y Relaciones Institucionales de la Nación”. By Knight Piesold Consulting. P.4.

The Diaguita Indigenous Community
Complaint before Inter-American Commission on Human Rights
Against the Pascua Lama project

The Huascoaltinos community in the Huasco Valley of Chile's III region, of indigenous descent from the Diaguita peoples, filed a complaint last year against the State of Chile, over concerns regarding Barrick Gold's Pascua Lama project grounded on:

- Insufficient or non-existent consideration to affected indigenous peoples;
- Impacts of the project on glaciers;
- Impacts of the project to water reserves in their valley (Valle del Huasco);
- Reduction to water discharge in local rivers that are key to their livelihoods and customs;
- Impacts of the project to grazing activity;
- Impacts of the project to vegas (mountain wetlands)
- Impacts to agricultural activity;
- Impacts of Pascua Lama to ancestral lands;
- Barricks' closing of access roads to the area;
- Impacts to archeological sites of ancestral/indigenous significance; (including the building of Barrick's airstrip on indigenous cultural lands)

The Huascoaltino territory, belonging to the Diaguitas indigenous community, comprises 500,000 hectares, and is situated in the Huasco valley. The territory has some of the most pristine freshwater reserves in Chile. The territory includes 281 different species, including llamas, vicuñas, condors, pumas, flamencos, and many others. Fourteen (14) of these are endangered. The community is especially concerned that mining activity from Pascua Lama, which is situated in the high Andes, immediately above the Huascoaltino territory, will affect water reserves in the region, both due to impacts to glaciers and water volume and quality.

Below is an image taken from Google Earth which shows the relationship between the Huascoaltino community and the high mountain glaciers in Barrick's Pascua Lama vicinity.

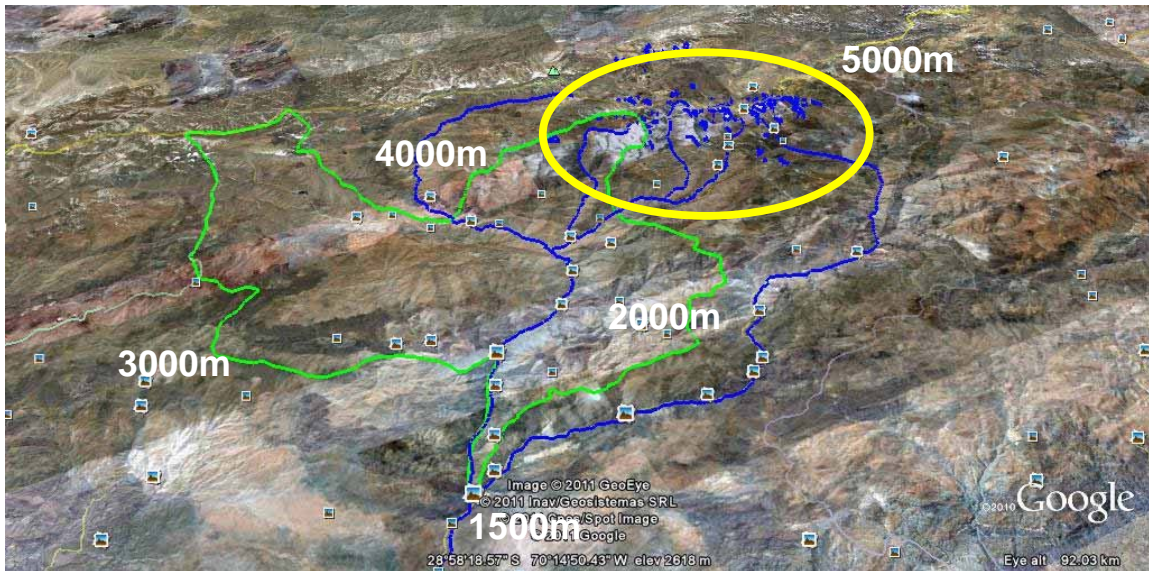


Image shows relationship of indigenous lands to rivers, glaciers and Pascua Lama.

A few elements to note in this figure. The image has been positioned with the highest lands in the background, and the lowest lands in the foreground. Notice the approximate elevation readings running from 5000 meters near the rear of the image (where the glaciers are located) to the foreground, which is considerably lower. Water runs hence from back to front; the blue long lines

are the rivers born at the foot of the glaciers. The glaciers mapped as blue polygons are taken from our Barrick glacier inventory and appear in the background mostly within the yellow oval. The yellow oval is the approximate area of the Pascua Lama project (not including access roads). The large green irregular polygon is the Diaguita indigenous territory. Notice that the glaciers in the Pascua Lama area, despite being mostly outside and above the indigenous territory, provide the main water supply into the indigenous lands. Clearly the indigenous territory ecosystems depends **entirely** on glacier water melt from the Andes highlands stemming from Pascua Lama's territory.



Barrick bars entry to Diaguita indigenous lands

One of the key points made by the Diaguitas in their complaint is that Barrick failed to consult their community or take into account their opinion, regarding impacts, as mandated by inter-American law, Chilean law and by international law, particularly, ILO Convention 169 on Indigenous Peoples. As such Barrick's due diligence on indigenous rights is in non-compliance. They argue further that the Pascua Lama project is situated entirely within Diaguita ancestral lands.

Barrick has also barred access of the community to their territory, placing a locked gate on an access road, aggravating conflicts and discontent with the community.

Finally, the complaint cites numerous human rights violations of the project, including (but not limited to), private property, judicial guarantees, judicial protection, a healthy environment.

The relationship between the Diaguita indigenous community's water supply, the glaciers, and Barrick's operations are clear from the image above. The concerns expressed by the Argentine National Park Service over Barrick's impacts to vegetation (vegas systems), wildlife, glaciers and water sources, which are practically identical on both sides of the border, only buttress the concerns expressed by the Diaguita-Huascaltinos which are absolutely legitimate and merit further study.

Other Environmental Impacts

In addition to the impacts cited by sections in this report, in this section we briefly mention a few additional concerns that multiple actors have expressed to us, some with documented evidence to sustain claims, others which need to be examined further before definitive conclusions can be drawn. What is unarguable is that each of these generates significant concern over Barrick's due diligence compliance in matters with relevant social and environmental implications and hence merits further review.

Explosive materials

Barrick is accused by blast operators (speaking anonymously to CEDHA) of skimming costs and utilizing less expensive but more contaminating explosive materials used in the destruction of the mountain terrain in order to get to mineral deposits and to introduce roads to access mining sites.

Illegal Discharges of Barrick's Waste Water into Local Water Ways

The environmental organization Inti-Chuteh, which adheres to this due diligence review, filed a legal complaint in 2005 at the court of San Juan, alleging that one of Barrick's suppliers was illegally discharging waste water into local streams, at the Bajo Segura Santa Lucia waste treatment facility, brought from the Veladero mine to San Juan city. Barrick's supplier was fined for that act, but most importantly, this incident reveals the lack of control Barrick maintains over its supply chain.

Corruption in Contract Awards to Suppliers

A short time ago, in San Juan Province, a mining news source revealed that Barrick Gold's management in San Juan was engaged in corrupt handling of its supplier contracts which were over-billed to skim off higher profits. Contracts were awarded to the same contractors.

Illegal Project Extraction at Argenta

Barrick is accused by workers (speaking anonymously) of initiating a new project, Argenta, with high grade minerals, sited adjacent to Veladero (at: 29°24'40.18" S, 69°53'55.60" W) without any environmental impact assessment or government approval. Allegedly, Barrick utilized project infrastructure at Veladero to exploit the Argenta project for two years 2009-2010, until a complaint was filed by the workers union against the company, at which point Barrick took measures to formalize the operations. Barrick now cites the Argenta pit as active since 2010.⁷ It is speculated that Barrick chose to exploit Argenta without permits in a hurry to reap profits of soaring gold prices.

Illegal Land Confiscation for Barrick's Access Road

The arrival of Barrick Gold to Argentina, much as occurred in Tanzania, was surrounded by corruption and illicit acts to acquire lands to make way for Barrick. The 180km road leading up to the Veladero mine, [belonged to local families living in Tudcum San Juan](#), including the Villanuevas, which are the legitimate heirs to this land, and whose families have lived off of cattle grazing in the highlands where Veladero and Pascua Lama are located today. These families have been the subject of falsified land title sales, which includes the complicity of legal notaries that have referred to and documented a sale of the property with the supposed consent of the spouse of the original

⁷ See: <http://www.reuters.com/finance/stocks/companyProfile?rpc=66&symbol=ABX.TO>

land title owner, which never existed. The falsified sale cites the wife of Villanueva as an Argentine citizen with an Argentine citizen registration number. In fact, say family members, she is Chilean, which makes the entire operation invalid.

The Villanuevas have lost their legitimate ownership of these lands. Today they have no access to the project site and have to ask Barrick permission to allow their farm animals access to areas near the town where they live. We have viewed the legitimate land titles in possession of the Villanueva family, and we have personally accompanied several of the Villanueva heirs to attempt to enter the project area, only to witness how Barrick impedes their entry into their ancestral property. A case has been filed in local courts, however several family members have received death threats and have been pressured to drop their claims.

Dust and Microclimate

The massive dust emissions created by Barrick's activities have not been considered in glacier impacts. This is an issue which was cited, among others, by the Argentine National Park Services as well as by the Diaguita Indigenous peoples. In fact, Barrick's operations in the area have created a micro climate in the immediate region, which has changed climate conditions, and introduced a significant amount of suspended particles, which contaminate the natural environment in several ways, including accelerating glacier melt and contaminating rivers and streams. Locals and workers have observed over the years that glaciers along the road, for instance, or in the project vicinity, have reduced in size considerably, and speculate that this is likely due to the changing climate and dust caused by Veladero and Pascua Lama activities. Rivers and streams have also changed their appearance; several streams near the project pit that were once very clear and transparent, now appear muddy and opaque.

Witnesses indicate that the project site is permanently surrounded by an enormous cloud of dust, despite some efforts to minimize this impact by spreading water over the site and on access roads. The problem with excess dust in the atmosphere in high mountain areas is that much of this dust comes to rest on white snow-covered glaciers, which naturally reflect sunlight and heat. This dust cover by changing color, alters albedo conditions. The result is a darkening of the ice mass, and thus the ice body absorbs more heat, increasing its melt rate. For this reason, mining activities should take place at a safe distance from glaciers, particularly uncovered glaciers. Satellite images over time are showing that both glaciers as well as perennial ice fields and numerous ice patches that remain over the summer months, are reducing in size in the project area over the last several years. These smaller patches of ice, taken collectively, just as glaciers, play a significant role in providing constant water provision during warm summer months. They are by no means "insignificant" [as Barrick suggests on its website](#).

The following picture is taken as a screenshot from a clandestine video taken with a cell phone (hence the low image quality) recorded by a visitor to the Pascua Lama site, at the base of the Estrecho Glacier



Trucks Generate Large Dust Cloud at Base of Estrecho Glacier Accelerating Glacier Melt

The reader can see this same site on Google Earth at:
[29°18'34.49" S 70°00'40.51" W]

We can see in the image, several trucks at work probably hauling rock away from the pit site, part of the Estrecho glacier is in the center and top of the image, while an important cloud of dust encircles the air around the vehicles. The cumulative impact of this dust over time to glaciers, to local waterways, and even to human health, can be devastating. The National Glacier Act, in Article 6, prohibits this deposition of dust on glaciers (see next section).

[The National Glacier Protection Act](#)

(Barrick's Leveraging Influence in Government)

Argentina's National Glacier Protection Act, before being officially instated in October of 2010, suffered several major setbacks, including an attack by Barrick, first underhandedly by leveraging its influence over the Executive, and then when this failed, Barrick attacked the law in a legal dispute lodged in federal courts, a clear intromission into Argentine politics.

a) The Lead up to the Glacier Act and the Barrick Veto

Concerned over growing mining operations in sensitive glacier areas in Argentina, the Argentine National Congress enacted in 2008, the world's first [National Glacier Protection Act](#), which not only declares all ice reserves as of the "public interest", but specifically protects glaciers, debris-covered glaciers, rock glaciers, and permafrost from all impacts, including specifically, by way of Article 6, *prohibiting mining activity* where such reserves exist.

(unofficial translation of Article 6 of the 2010 version of the Glacier Protection Act)

Art. 6º – Prohibited Activities

All activities that could affect the natural condition or the functions listed in Article 1, that could imply their destruction or dislocation or interfere with their advance, are prohibited on glaciers, in particular the following:

- a) The release, dispersion or deposition of contaminating substances or elements, chemical products or residues of any nature or volume. Included in these restrictions are those that occur in the periglacial environment;
- b) The construction of works or infrastructure with the exception of those necessary for scientific research and to prevent risks;
- c) Mining and hydrocarbon exploration and exploitation. Included in this restriction are those that take place in the periglacial environment;
- d) The installation of industries or the building of works or industrial activity.

While both of Argentina's national houses of Congress, unanimously approved the world's first National Glacier Protection Act with little debate near the end of 2008, a few days later, *unexplainably for most at the time*, the Argentine President vetoed the law. The veto led to the resignation of Argentina's Federal Environment Secretary, as she had worked on the draft of the law and had expressly crafted Article 6, the section on the prohibition of mining in glacier territory.

It seemed logical at the time, that such sensitive environmental resources such as glaciers, particularly in extremely arid regions, such as San Juan Province, La Rioja, Catamarca, Salta and Jujuy, where year long water supply is always at risk, would be protected from industrial activity that would otherwise destroy them. The small, but eventually very large details most missed during the glacier debate, including Barrick, were that *one*, there were many more glaciers in the region than anyone ever imagined; *two*, there were many "rock glaciers" at risk from mining—which most could not even recognize as they don't evidence ice to the untrained eye, but might have just as much ice in their interior as ordinary uncovered glaciers; and *three*, that most of Argentina's new mining exploration projects in the highland mountains in provinces like San Juan, La Rioja, and Catamarca, are surrounded by glaciers and permafrost, making them largely off-limits to mining. San Juan for example, is said to have more than 12,000 glaciers, in their arid high mountains.

Nearly all of Congress strongly supported the law when it was first treated in 2008, including congressional votes from the key mining provinces. The mining lobby remained surprisingly (and literally) dormant, even Barrick's closest allies in Congress ignored the content of the law, and one can only imagine this was so because they didn't read the bill, or they didn't fully grasp what glacier protection really meant for mining operations that were already cutting into ice with their bulldozers

in search of precious metals. It was only after the unanimous approval of the law, and the reading of the text of the bill on the Congressional floor after the vote had been politically negotiated, and in the next few days after mining operators began to read the new law, that many of the radically pro-mining Congress members, reversed their vote position and reacted viciously against the law they had just approved, but it was too late, they had ironically already voted it into force. It was at that point that the mining lobby began to work to destroy the new National Glacier Protection Act.

The veto took but a few days to materialize. The congressional battle that ensued would draw out for nearly two years.

All of a sudden, what was near 100% support for the law, after the mining lobby engaged in both houses of Congress, turned into a tough battle in both houses, which ended up in near deadlock. The new vote on the new law took place at the end of September of 2010. But in July of 2010, a few months before, when it became clear that the federal glacier protection law would indeed make a come back, something very curious and unusual took place. Several pro-mining governors of Argentina, from provinces such as San Juan, La Rioja, Catamarca, and others, where mining is currently in conflict with glaciers and permafrost zones, flew to Canada, invited by Barrick Gold's CEO, Peter Munk, for a closed-door meeting. Immediately upon their return to Argentina, they announced a [Glacier Framework Law](#), which each governor would take back to their province and submit for approval in the various respective legislatures. This "model law", was in their view, a law that catered more appropriately to provincial needs, a euphemism for "this is a law that won't ban mining where there are glaciers". And that is exactly what they did.

The case of San Juan was emblematic. The San Juan version of the law left out permafrost and inactive rock glaciers (which can contain huge quantities of ice), from the list of protected glacier resources. It also failed to mention mining as a prohibited activity in glacier territory. The law was clearly crafted for (or by?) Barrick Gold and was approved instantaneously in San Juan with no debate what so ever.

b) The Barrick Veto

Much has been said as to the political reasons leading to the presidential veto of the National Glacier Act in 2008, which is generally referred to in Argentina as "the Barrick Veto". This veto was extremely impacting, particularly because the Congress unanimously approved the law, including with official support, practically in unison, in favor of the law, and because the president is from a glacier-rich area of Argentina. What has remained in local lore is that this veto came as a direct request from Barrick Gold's top management as well as from several other mining actors, extremely upset with the glacier law. Barrick obviously denies having any influence over the veto.

We have already stated above that the [National Glacier Protection Act](#), which was revived two years after the veto, in a stronger and even more protective version, makes Barrick's investments in Argentina illegal, as it fully and unequivocally protects permafrost, rock glaciers, and glaciers alike, expressly prohibiting mining where these ice forms are present.

Before we look at Barrick's Pascua Lama project and its glacier impacts, perhaps a good question to ask is how other mining companies are reacting to the law? We note a comment made by the company MALBEX, operating the Del Carmen project not too far from Pascua Lama, in a report to its shareholders following the approval of the National Glacier Act, which reveals just how significant this law is for mining companies operating in glacier zones:

Although it is impossible to assess the full impact of Federal Law 26.639 or the San Juan provincial law on the Corporation at this time, either law could adversely impact and potentially curtail much of the mining activities of both foreign and domestic firms in the region and may adversely affect the ability of the Corporation to develop a mining project on certain of the concessions comprising the Projects, which would have a material

adverse affect on the operations, financial condition and results of operations of the Corporation.⁸

Evidently Malbex realizes that the new Glacier Act will greatly hinder mining activity, including their own Del Carmen project.

So let's now turn to Barrick's Pascua Lama project and look at the implications of the National Glacier Act. The following table, extracted from BGC's report prepared several years earlier for Barrick on permafrost at Pascua Lama reveals the extent of Barrick's problem with the law.

CMN / BEASA Junio 25, 2009
 Estudio de caracterización del Permafrost Proyecto No. 0442-009, 0443-009

Tabla 8: Infraestructuras y permafrost.

		Comentario	Probable Permafrost	Posible permafrost
Lama	Area de la Cuenca	Arroyo Turbio, 24.2 km ²	14.2 km ²	7.0 km ²
	Area del botadero	Posiblemente la mayoría del área es permafrost	0.99 km ²	0.46 km ²
	Area del rajo	Toda el área es permafrost	0.91 km ²	0.01 km ²
	Sitio de la planta	Solo pequeñas partes son permafrost	Parcialmente	-
	Tailings Facility	No se espera permafrost a estas elevaciones	-	-
Pascua	Area de la Cuenca	Rio del Estrecho, 35.9 km ²	18.1 km ²	14.2 km ²
	Area del rajo esperanza	Toda el área es permafrost	2.06 km ²	0.03 km ²
	Botadero Nevada	La mayoría del área es permafrost	1.25 km ²	1.58 km ²
	Divisiones norte de los canales	La mayoría de los canales probablemente están localizado en permafrost	Si	Si

Barrick's consultants reveal serious conflict of Pascua Lama with the Glacier Law.

The table is divided into two sections, Lama (the Argentine side of the project) and Pascua (the Chilean side of the project). Notice the comment column, in the boxes to right of the "Botadero" (waste rock pile site) and the "rajo" (the pits), highlighted by the yellow ovals, the comment for both is either "toda el area es permafrost" or "la mayoría del area es permafrost". This translates as, "all of the area is permafrost", and "most of the area is permafrost", respectively.

The implications of this report (Barrick's own) when considered alongside the new glacier act are lapidary for Barrick. Barrick's Pascua Lama project is simply illegal. Mining activity is strictly

⁸ See: <http://www.malbex.ca/Documents/getDocument/2011.04.25-technicalReport-DelCarmen.pdf>

forbidden where there are glaciers or permafrost. This is the reason that Barrick first attempted to attack the law by obtaining a veto (which it did) and then also explains why Barrick, after failing with the effect of the veto, has decided to attack the law in federal courts. Other companies such as Xstrata Copper, which has over 200 glaciers in its' El Pachón project area have also filed legal complaints in the courts over the law.

We know from first hand sources, as our institutional president was the Environment Secretary of Argentina at the time of the veto, *that it was indeed due to pressure from the mining sector, including Barrick*, that forced the hand of the president to veto a law that had otherwise unanimous congressional support, even from the mining provinces, who seem to have missed the small print of the bill while it waded through congressional due process. Our president resigned from her office in government as a direct result of the veto.

c) Barrick's Legal Attack on the Glacier Act

In the end, and despite Barrick's achieving a presidential veto in the case of the first version of the Glacier Protection Act, the national law went on to narrowly edge past the approval limit by a handful of votes, in September of 2010. The new [National Glacier Protection Act](#) came back in full force, stronger than its predecessor, becoming the first national law ever, anywhere, protecting glaciers, debris-covered glaciers, rock glaciers, perennial ice and permafrost.

But Barrick, still concerned with the fate of Pasca Lama, which instantly became illegal, as the law's retroactive clause (Art. 15) mandated a review of any existing mining projects in glacier zones (due April 2011, and never produced by Barrick), Barrick, instead, began a systematic attack of the law, filing a judicial complaint in federal courts, arguing that the law is unconstitutional.

The legal attack propped up a workers' union to file an injunction order request, to declare the law unconstitutional. Barrick came in later as a co-complainant. This emergency legal instrument, to which we often recur when seeking emergency measure *to avoid* irreversible harm in cases of severe environmental degradation, generally (despite it's supposed immediate attention granted by the courts) will take several months, if not more (sometimes years) to resolve.

Barrick however seems to have much larger influence in the federal courts, and in a mere 48 hours, the judge, *against all logic, and in record time*, reversed the spirit of an injunction order, which is grounded in a "precautionary principle"—which one would naturally assign to the protective element sought (glacier protection in this case is the issue), and favored instead, to sustain an activity that is allegedly destroying natural resources. [The injunction order was granted](#) effectively but temporarily suspending select articles of the law for Barrick. The case will now have to be resolved by the National Supreme Court.

[Report on Impacts to Water Ways by Veladero and Pascua Lama](#)

Mining projects affect water, both in terms of the large volume consumed by mining activity, as well as by resulting contamination from the processing phase. In Barrick's case, there is no exception to this.

The first point of concern over both Veladero and the Pascua Lama projects is the lack of good baseline data information about water quality, and other statistics necessary to understand the condition of the ecosystems that are being (and that will be) affected by Barrick's mining operations in the area. There is also no information about how much water is supplied to the streams by the many dozens of glaciers in the project vicinity. On this last point, Barrick considers the relationship insignificant, which is simply false.

What we do have are reports that are beginning to appear showing that Barrick's Veladero and Pascua Lama *are* affecting, *and will continue to affect*, water quality and supply. [The Argentine National Park Services report](#) cited earlier specifically mapped the areas of mining activity that are impacting water supply to the San Guillermo Biosphere Reserve.

For other stakeholders, without government access to information, accessing information to water quality is a complicated venture. Our institution was systematically denied information by public authorities until through an administrative action, were we able to obtain data from monitoring points along the rivers downstream from Veladero and Pascua Lama.

[Analysis of this data](#) showed a troublesome anomaly in 2009 with peaks of heavy metals, including unexplainable rises in levels of lead, arsenic, aluminum, and mercury, as well as high levels of oils and grease, exceeding that permitted by law, at a given moment during that year.

We cannot be sure of the reasons for these registered peaks in contaminants, however one possible explanation is an accident that occurred some time during 2008, of the [collapse of a massive rock waste pile site at the Veladero mine](#). This accident will be described in more detail below in the section about the collapse of Barrick's rock pile waste site.

Barrick reacted to our report by suggesting that the company was preparing legal action against our organization, hardly indicative of any tolerance to critique. What was most ironic is the statement by Barrick suggesting that our data was of "unclear origin"⁹, ... the data came from non other than Barrick itself, through our information request to the government of San Juan, as it is Barrick's own water control monitoring data!

[Environmental Impact Assessment Deficiencies at Veladero](#)

The only documents that we have to properly gauge the magnitude of the activity to take place at Pascua Lama, are Barrick's own Environmental Impact Studies as no one else is allowed on the project premises. Barrick has even hindered public official access to the Veladero and Pascua Lama project site. A short time ago, the geologist and glacier specialist of the National University of San Juan, who was responsible for carrying out the first official glacier inventory for the province of San Juan, confided to us, [a report he prepared on the deficiencies of the Environmental Impact Study that Barrick produced for its Veladero mine](#).

While this review is about Pascua Lama's social and environmental deficiencies, we should note that many of the installations and geographical areas and practices that will be used at Pascua Lama come from or can be expected to mirror practices at Veladero, which originally was part of the

⁹ See: http://www.cepsm.com.ar/mostrarnoticia1.php?id_noticia=9803

same project. Today they are adjacent, while some portions of the project are concurrent and identical. Many of the facilities and infrastructure, in fact, are used for both projects. Therefore examining Veladero which is currently in extraction to draw conclusions about what we can expect at Pascua Lama, makes absolute sense.

Some of the deficiencies in the Veladero EIA highlighted by [Milana's report](#) are:

- Nearly no consideration of water relevance of glaciers and other ice reserves (such as rock glaciers and permafrost) in the area; (p.1)
- Near complete neglect of glacier presence; (p.2)
- Potential impacts of mining activities on glaciers not addressed; (p.2)
- Undue placement (and ignorance of relevance) of project infrastructure on glaciers and permafrost; (p.2)
- The water cycle analysis is completely deficient (p.3)
- Proper glacier specialists were not consulted; (p.4)
- Lack of consideration of the role of glaciers as discharge contributors to rivers and streams of the region: (p.11)
- Undue attention to permafrost in the introduction of roads; (p.18)
- Poor or no proper calculation of water content of glaciers; (pp. 27-28)
- No consideration for thermal alterations to the area due to mining activity, and their respective impacts; (p.34)

One can conclude from Milana's review of Veladero and Pascua mine project areas, that Barrick has omitted significant and extremely relevant considerations on glacier and permafrost presence in the project areas which can have dire consequences on project safety and environmental/social impacts, as well as impacts to indigenous lands and rights. Further, the hydrological value of these ice/water reserves is grossly ignored, omitted or overlooked. The same conclusion can be drawn from the [opinions published by the Argentine National Park Service](#) regarding the likely impacts from Pascua Lama.

Finally, Barrick makes no consideration for the impacts caused by project infrastructure and activities on these reserves. The Veladero waste pile collapse which we will describe in the next section, is precisely the sort of accident and high-risk situation produced by this gross oversight, and its not the first time such oversight and errors occur at Barrick Gold projects around the world.

[Report of a Colossal Landslide of Waste Pile at Veladero](#)

Barrick has shown repeatedly, in operations around the world, that it does not get structure calculations and safety controls right. Collapses of mines and accidents at Barrick operation such as at Bulyanhulu in Tanzania, and at the Cowal project in Australia, as well as design flaws at Homestake project in South Dakota, USA, and the Renabie project in British Columbia, show repeatedly and systematically that Barrick's safety designs are simply not up to standards. In some cases, the gross errors have resulted in serious and even fatal human impact. The Veladero mine in Argentina is the most recent example of how oversights, and short-cutting costs in study and design can lead to massive failure and high risk at Barrick's operations.

Juan Pablo Milana, renown geologist and glacier expert, warned government authorities in the early 2000s, when he first read Barrick's Veladero Environmental Impact Assessment,

“Given that glaciers have been virtually ignored, in the descriptive part of the report, there is little probability that we can understand the impacts of the mining operations on them. ... [the EIA] ignores cryosphere water reserves such as debris-covered glaciers, rock glaciers, and permafrost, [and] it does not inform on the direct impacts of operations on these”. ([EIA Critique by Milana](#), p.2)

He goes on to mention the importance of the constant natural and anthropogenic variance of ice forms over short periods of time, according to precipitation and thermal balance (which can be altered by industrial activity, contamination, physical intromission into the ice such as excavation, and excessive weight placed on the ice, for instance by rocks piled on the surface such as in the case of rock waste dumps). This is something that BGC also states in their 2006 report to Barrick. Studies must continue on an ongoing basis to determine how various project infrastructure is reacting to glaciers and other ice transformation, be it due to natural climate causes or to the types of anthropogenic causes we see at Veladero and Pascua Lama.

Barrick took no to correct the project design in order to properly consider the eventual environmental impacts and project safety risks that placing project infrastructure (such as a rock pile) on glacier ice or permafrost might have. Barrick went ahead and maintained its principle rock pile waste dump site for Veladero, and began placing millions of tons of rock debris, on delicate and unstable permafrost.

And then the foreseeable and predictable accident occurred. A massive rock slide, the size of a small town (or 50 football fields), an accident that has actually been prognosticated by Milana and others, came tumbling down the mountainside, destroying everything in its path. It moved nearly a third of a kilometer before it came to a halt not far from Veladero's leach pad valley (lixiviation) site. Had it impacted the leach pad valley, the accident could have produced a colossal disaster. Barrick was lucky.

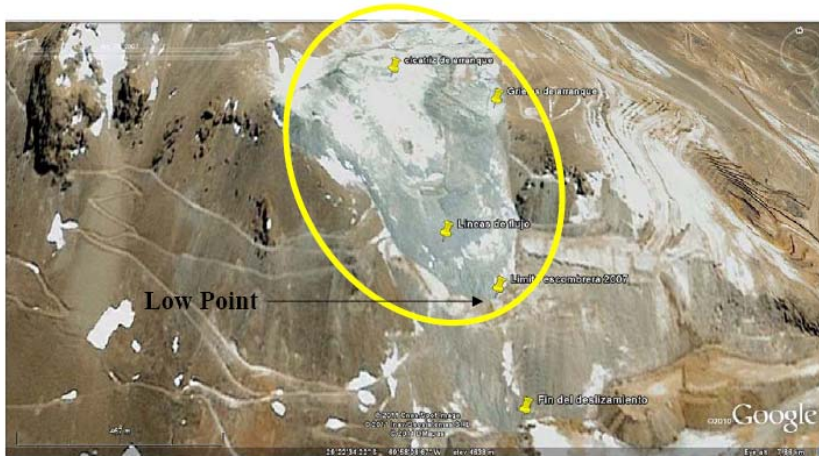
The collapse, incredibly, went unreported to authorities. Barrick has never revealed that this collapse occurred, an accident that could have been avoided; an accident that occurred due to the systematic negligent behavior by Barrick's team, which we have seen occur again and again at various project sites. Despite being warned that this risk existed, Barrick never took measures to address the risk.

The images and the implications are startling. Our institution published a [report](#) only a few weeks ago, summarizing Milana's findings. The accident occurred sometime between 2007 and 2008. Below are “before” and “after” images taken from Google Earth The site, which the reader can visit by entering this address in the Google Earth search box is at:

29°22'45.00" S 69°57'40.58" W

The before and after pictures are accessible using the *time feature* in Google Earth's toolbar.

BEFORE



Rock pile at Veladero mine site in 2007, before the accident.

AFTER



Rock pile at the Veladero mine, in 2008 after the accident

Some time between 2007 and 2008. This massive rock waste pile dump of the sterile rock from the Veladero mine came crashing down advancing nearly a 1/3 of a kilometer. Fortunately, the collapse advanced away from the lixiviation valley (2 kilometers away-see *next picture*). The terrain slowed and halted the collapse before causing further damage. Below is an aerial image showing the relationship of the waste pile to the lixiviation valley site below (encircled in yellow). Had the rockslide gone into the lixiviation site the accident could have been tragic and extremely costly to clean up.



Google Earth Image shows close proximity of rock pile collapse to lixiviation valley below Veladero.

Since the publication of our report, on October 20, 2011, the company has remained silent about this incident, although we know that Barrick has been confronted by several official and private actors about this unreported accident. We know from confidential sources in government, that the images have been confirmed, and that a formal investigation into the matter is underway.

Further, since the publication of our report, several individuals that work at Barrick Gold's Veladero mine, which were employed and at the site at the time of the collapse, but who wish to remain anonymous for fear of losing their employment, have communicated with us to confirm that this collapse indeed occurred, and that it indeed took place in early 2008. We met with one of these sources during our last visit to San Juan, who provided further details as to why this accident occurred, which not only included the negligent failure to consider the effects of permafrost under the rock pile to the stability of the pile, but also due to Barrick's gross error of deciding to stall the progressive deposit of sterile waste rock onto the site which serves to permanently buttress the structure, in addition to depositing excessive amounts of fine matter on the pile.

This illogical decision, taken by Barrick's upper management, unexplainably diverges from the planned process and design of the rock pile, which in turn would dangerously alter the dynamic of the pile. Why would Barrick do this? If one considers the context in which the decision is made, there is clear logic behind the risk taken by Barrick, financial logic that is. Barrick's decision to favor rock extraction with high gold content instead of keeping to schedule and also extracting sterile rock to buttress the rock pile makes perfect sense if the priority is to take advantage of soaring global gold prices and speed up the gold extraction process. This implies focusing on extracting rock with high gold content and sending this rock for lixiviation, which also means *not* extracting sterile rock for the waste pile which has no monetary value but certainly has an extremely high safety value. The source we spoke to that worked at the mine at the time, confided anonymously with us suggesting that this was indeed the case.

Barrick's dilemma, hence was *the more trucks hauling sterile rock to the waste pile, the less gold to produce*, and as a consequence, Barrick loses windfall profits from soaring gold prices. It's more profitable in the short term to ignore safety hazards from not proceeding to plan with the rock pile design. An accident was in the making.

In other words, Barrick let greed for more gold and less sterile rock, determine the decision that led to this accident. These factors combined over time to produce this extremely dangerous collapse which could have had dire consequences and could even have resulted in loss of life. We should

note that we are not aware of what the actual consequences of the accident have been, since the accident remains unreported. *Officially it never existed.*

The implications of this accident for Pascua Lama are very direct. It is clear from the information we have reviewed thus far, that Barrick Gold has committed the same negligent oversight with its project design for Pascua Lama. Waste pile dumps are in both countries, placed on permafrost areas with rock glaciers also in the vicinity. This is not only illegal in Argentina, but it is very dangerous, as we have learned from the case at Veladero. We can hence expect that similar risks of accidents will exist at the Pascua Lama project site.

Below is Barrick's Pascua Lama map, superimposed on an actual satellite image captured in Google Earth. We can see glaciers entering into, or adjacent to, the main project extraction pits and the waste pile sites, which are polygons in purple and red, respectively.

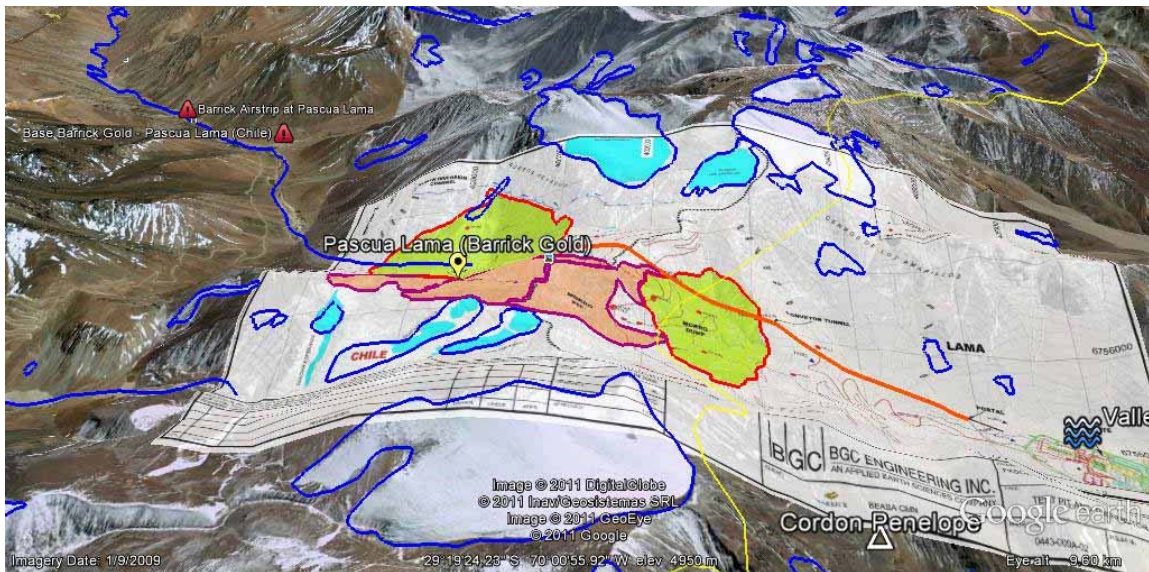


Image superimposes Barrick's Pascua Lama project map in relation to glaciers in vicinity.

An OECD Guidelines Specific Instance Complaint Against Barrick Gold for environmental norms violations

In early 2011, the Argentine non-governmental group FOCO, accompanied by nearly a dozen other groups, including members of Congress and local environmental advocacy organizations, presented a *Specific Instance* complaint to the National Contact Point of the Argentine government, for Barrick's alleged violations of the OECD Guidelines for Multinational Enterprises.

The complaint, which is still being reviewed by the Argentine foreign ministry, lists innumerable violations of social and environmental codes. Some of these include:

- Erroneous calculations over water consumption vs. water availability in rivers; (p.9)
- Impacts to the San Guillermo Biosphere Reserve; (p.12)
- The destruction of glaciers via explosives; (p.13)
- Contamination of aquifers; (p.14)
- Contamination of the air/atmosphere; (p.14)
- Heavy metal contamination of waterways; (pp. 23-24)
- Attacks by Barrick in the court system on Argentine laws that control their environmental impact; (p.34)
- Aggression by Barrick's security staff of peaceful protesters; (p. 32)
- The failure to provide transparent information; (p.47)
- The failure of Barrick Gold to meet "the responsibility to respect human rights" as laid out in the UN's Protect, Respect and Remedy framework and Guiding Principles – the Ruggie Framework (p.51)

FOCO's complaint provides extensive documentation and references to substantiate each of the mentioned allegations. Many of the social and environmental norms protected by the OECD Guidelines have natural parallels in the Equator Principles, and hence, evidence presented in the FOCO complaint, provides important insight to any due diligence review of Equator Principles compliance by Barrick Gold for Pascua Lama.

Relevance of the Equator Principles to Barrick's Operations

The [Equator Principles](#) are largely modeled after the [International Finance Corporation's Performance Standards](#), which offer the most widely accepted social and environmental standards for assuring corporate compliance with social and environmental norms. As such, they are a useful benchmark upon which to measure Barrick Gold's due diligence compliance, risk and performance in terms of social and environmental impacts and sustainability, and subsequently to determine financial, social and environmental risk that might result from this project.

Barrick is in conflict with nearly every one of the IFC's Performance Standards, including sustainability policy, environmental management, economic implications, worker rights, water-air-land pollution, community protection, biodiversity protection, indigenous peoples, cultural heritage, and disclosure of information. All of these dimensions of the Pascua Lama project, for many of the reasons presented in this report, present enormous gaps and deficiencies in the Pascua Lama case.

What does this due diligence failure imply for Equator Principles due diligence? Below we review each section of the Equator Principles and offer a summary of conclusions drawn from our review.

Preamble

The [Equator Principles](#) (henceforth, EPs), were created to ensure that projects financed by EP signatory banks are "developed in a manner that is socially responsible and reflect sound environmental management practices ... [and so that] negative impacts should be avoided where possible" (Preamble, p.1).

The EPs also state that banking institutions should "promote responsible environmental stewardship and socially responsible development" (Preamble, p.1), and finally, that signatory financial institutions "will not provide loans to projects where the borrower will not or is unable to comply with our respective social and environmental policies and procedures that implement the Equator Principles". (Preamble pp. 1-2)

We hence question, to what extent Barrick Gold's operations for both Pascua Lama and Veladero, with so many local complaints stemming from private stakeholder groups, as well as from official sources, such as the National Park Services, "comply" with the EPs due diligence requirements.

Scope

Barrick's Pascua Lama project expects investment of some US\$5 billion, which leads us to presume that any financial support that might be provided by an international or large financial institution will likely exceed the US\$10million threshold limit for applicability of the EPs.

We should further note that the role played by export credit agencies (ECAs) is to underpin and provide guarantee financing for other financial institutions to participate in the investment. The technical expertise of an ECA, due to its association to the State imply greater legal responsibilities and *should* hence be more robust, in terms of evaluating social and environmental compliance. Private financial banks understand this and use information and due diligence reviews by ECAs to evaluate their own due diligence conditions and considerations. For this reason, the opinions versed by EDC and Exim Bank in this case, over Barrick's compliance with the conditions set forth in the Equator Principles are crucial to depict an appropriate picture of Equator Principle due diligence compliance.

Further, export credit agencies generally provide *public funding*, which by way of the ECA's association to the State, explicitly implies that investments made by such institutions should

consider and respect those international obligations, including human rights obligations and international environmental law, as signed on to in human rights and environmental treaties adhered to the States they represent, in this case, the United States of America and Canada. The example of the Norwegian Trust Fund divestment following the Ethics Council review of Barrick's operations in Papua New Guinea is an example of how due diligence reviews by State agencies should play an important role in assuring that public funds are not invested in irresponsible projects that violate the law and cause severe human rights and environmental harm.

As such, and for these reasons, the significance and relevance, *and the responsibility* of export credit support is much greater than that of a mere private financial institution. The due diligence compliance of the company to all applicable norms, international law, global standards, human rights, environmental law, etc., and specifically to the Equator Principles, should be carefully reviewed and cleared before any financing is allotted to this project.

Principle 1: Review and Categorization

Pascua Lama, due to the magnitude of operations, due to the very significant impacts to the natural environment, due to the extraction of billions of tons of rock for mineral processing, due to the large amount of contaminated waste that is to be generated by the project, due to the trans-boundary movement of toxic waste, due to the danger posed by large infrastructure and waste material deposited on unstable grounds such as permafrost, due to the risks posed to sensitive natural resources such as rivers, glaciers, mountain wetlands (vegas systems), due to the destruction of glaciers by pit excavation and rock piles, due to the destruction of natural resources and endangered species (such as vicuñas, condors, pumas, etc.), due to the fact the project is located on a UNESCO protected site—the San Guillermo Biosphere Reserve, due to the presence of indigenous community lands that coincide with the project area, clearly establish this project as a Category A Project, classified by the EPs as

“Projects with potential significant adverse social or environmental impacts that are diverse, irreversible or unprecedented”

Principle 2: Social and Environmental Assessment

The Environmental Impact Assessments of both Barrick's Pascua Lama and Veladero project have been widely criticized as being deficient from their initial conception.

We draw particular attention to

- [The Complaint filed by the Diaguita indigenous community to the Inter-American Commission on Human Rights](#) which we have cited above, and which centers on impacts by Pascua Lama to glaciers, rivers, cultural heritage sites, agricultural production, among others;
- An extensive number of complaints and reports filed or presented in Argentina by the [National Park Service](#), and by environmental organizations such as FUCI, [CEDHA](#), Greenpeace, Inti Chuteh, [FOCO](#), and others as well as individual experts, regarding Veladero and Pascua Lama's impacts to glaciers, water quality, rivers and other natural resources, in the project vicinity;
- Reports by scientific experts showing impacts by Pascua Lama and Veladero specifically to glaciers in the project vicinity; see for example: [a\)](#), [b\)](#)
- [Reports by scientific experts showing gross errors in environmental impact studies related to Barrick's operations](#);
- [A report by a renown scientific expert showing the unreported collapse of Veladero's rock waste pile site](#) due to having been placed on unstable (and legally protected) permafrost

zones, a systematic error committed in the poor design of rock piles by Barrick at several of its global operations;

- Failure to consider impacts to the [San Guillermo Biosphere Reserve](#), which Barrick falsely claims does not coincide with Veladero or Pascua Lama.

The extensive information that has already appeared concerning impacts and negligent attention by Barrick Gold to its operations should be of special concern considering that the project has not yet begun extraction and is only in the preparatory phase. The time is ripe to hold Barrick Gold accountable for these design flaws and due diligence non compliance, before the project moves forward, and before any financing is provided for this investment.

Barrick has shown that it has not sufficiently addressed any of these concerns or that it has completely ignored them. The company has instead (and in line with what the company has done in other countries) attacked critics, [threatened to file law suits against critics](#), and denies all wrongdoing, minimizing, negating or ignoring the extensive evidence that many individuals and institutions have presented revealing social and environmental impacts of the company's operations.

The mitigation plans which the company *has* presented, in a mere few cases, borders on the absurd, such as [Barrick's Glacier Management Plan](#), a proposal by the company to destroy glaciers "until the land is completely free of ice" with dynamite and bulldozers and haul them off in dump trucks, to other sites, so that the ice would not pose risks to their operations, or cause, "environmental harm" (see brochure cartoon depiction of this incredible idea at the onset of this report as well as Barrick's actual Glacier Management Plan annexed at the end of this report).

While this "*glacier destruction plan*" was immediately rejected by the Chilean government, and by local communities, including the Diaguita indigenous peoples, it is emblematic of the attitude Barrick Gold has had towards extremely sensitive natural resources, over which communities like the Diaguita indigenous peoples have expressed concerns. To date, Barrick had not taken into account concerns by this indigenous peoples community and is hence failing on its due diligence to incorporate and consider indigenous rights as well as Free Prior and Informed Consent of Indigenous Peoples as is established, for example, in the IFC Performance Standard 7.

We see this sort of insensitive attitude repeated over and over again by the company, in other dimensions of its environmental impacts, including for example, the same approach to sensitive highland wetlands systems (vegas ecosystems), which the company also proposed to "relocate" but literally cutting out squares of grass and moving them. Instead, it cited its leach pad valley (lixiviation valley) on one of the areas most sensitive vegas ecosystems. That vegas ecosystem now decays below a pool of cyanide infested water.

These cases are emblematic and systematic, reflecting how Barrick operates in other parts of the world.

Principle 3: Applicable Social and Environmental Standards

The circumstances presented in the previous section clearly demonstrate that Barrick Gold disregards numerous environmentally sensitive impacts of its operations and hence is not complying with widely accepted social and environmental standards or with Chilean or Argentine environmental laws and regulations. Three particular instances offer but a few examples that show that when confronted by *adverse* social and/or environmental norms, the company not only systematically violates those norms and conceals information about its impacts to natural resources, but actually works to circumnavigate its legal responsibilities.

1. Barrick works to avoid strict environmental laws. The leverage of the Presidential Veto of a newly enacted [National Glacier Protection Act](#) in 2008, was motivated by the fact that both

- Veladero and Pascua Lama are impacting glaciers, rock glaciers, and/or permafrost zones; [Barrick's attack on the law in federal courts is another example in this regard](#) ;
2. Barrick hides information about environmental risk and accidents, which it has the legal and moral obligation to report. A clear example is Barrick's cover-up of [Veladero's rock waste pile collapse](#), which we should note, was due to Barrick not adhering to laws and standards regarding project safety (in this case placing a rock pile waste site on delicate and unstable permafrost);
 3. Barrick has not produced, as mandated by Article 15 of the [National Glacier Protection Act](#), an appropriate specific glacier impact assessment, to address impacts to glaciers, rock glaciers, and permafrost zones, as well as provide participatory access to such studies and conclusions; instead, Barrick attacks the law in court in order not to comply.

Principle 4: Action Plan and Management Systems:

As mentioned in the previous sections, Barrick's operations are not only in violation of national and provincial law, but the company is also failing to provide evidence that it has the necessary action plans and management systems in place to assure avoiding impacts to:

- Glaciers affected by its operations; Barrick has shown itself to be absolutely insensitive to glacier presence, suggesting as we have previously mentioned, in brochures published by the company and in its' [Glacier Management Plan](#) (see annex) that it would destroy glaciers with bulldozers and dynamite, and move them to alternate sites;
- No action plan exists to manage impacts to the Diaguita indigenous peoples territory, which will be highly impacted by Barrick's operations with impacts particularly to waterways streaming directly into the indigenous territory; the company has also not addressed access to indigenous lands which have been closed off by the company;
- Barrick has failed to address impacts and manage impacts to the [San Guillermo Biosphere Reserve](#), which [Barrick incredibly denies it is in](#), despite the very clear delimitations of the reserve in government documents; the reserve fully encompasses both Barrick mining properties on the Argentine side of the border; Instead it is destroying glaciers and vegas systems, which are critical to the reserve.

Principle 5: Consultation and Disclosure

In direct violation of Principle 5 of the EPs, Barrick fails to engage with critics, and resists engagement with legitimate stakeholders, such as the Diaguita indigenous peoples. Further, as mentioned in the previous point, no public consultations on glacier impacts have been held since the passage of the [National Glacier Protection Act](#), as mandated by Article 15, to discuss Barrick's past impacts to glaciers, rock glaciers, and permafrost zones.

Barrick's violations of indigenous rights are in conflict with international law, with inter-American human rights legislation, as well as with IFC's Performance Standards, which have no-go conditions over projects that fail to gain free prior and informed consent from affected indigenous groups.

Principle 6: Grievance Mechanisms

Barrick has failed to provide accessible and legitimate grievance mechanisms to stakeholders concerned with glaciers and waterway impacts. Instead, [Barrick has threatened organizations which have reported impacts with legal action](#).

Principle 7: Independent Review

Barrick has not provided independent review for the problems and issues mentioned throughout this report.

Principle 8: Covenants

For the reasons mentioned above, Barrick fails to meet points a) compliance with host government laws, such as the National Glacier Protection Act; c) periodic reports as required by law (on glacier impacts) such as the glacier impact report mandated by Article 15 of the National Glacier Act;

Principle 9: Independent Monitoring

Barrick has not provided credible independent monitoring on glacier impacts, on indigenous territories, or on waterway contamination.

Principle 10: EPFI Reporting

Barrick does not provide the information necessary for a financial institution to evaluate compliance with EPs.

Conclusions on Equator Principles Due Diligence

For the many reasons cited above, due to the serious inconsistencies and gaps in Barrick Gold's environmental impact studies on both Veladero and Pascua Lama, due to failure of the company to respect national and provincial laws relating to glacier, rock glacier and permafrost protection and preservation, because Barrick has not fostered community participation regarding glacier impacts as mandated by the National Glacier Protection Act, due to existing evidence that both the Veladero and Pascua Lama projects are impacting the natural environment (including waterways, natural vegetation, glaciers and permafrost), due to the fact that Barrick's negligent omission of carrying out proper glacier impact assessments to gauge and protect against the impact on permafrost, glaciers, and rock glaciers, and deciding to build project infrastructure on sensitive permafrost grounds, because Barrick Gold has introduced roads crossing and destroying glaciers, rock glaciers and permafrost, because Barrick Gold has ignored impacts to indigenous territories, because Barrick Gold has ignored risks and impacts to the San Guillermo Biosphere Reserve, because Barrick Gold attacks laws that establish and regulate environmental protection, due to the fact Barrick threatens legal action against legitimate critics with legitimate concerns of its projects' impacts, we find that Barrick is not in compliance with the norms, standards and principles established by the Equator Principles.

Equator Banks have supported Barrick in the past despite its poor track record in many visible and highly controversial projects, some of which have led to severe environmental and social impact. Considering Barrick's sordid history relative to social and environmental due diligence, and its poor compliance history, the Pascua Lama project should go through a rigorous review of this record and assure stakeholders that the company has corrected its systematic failure to meet basic social and environmental due diligence obligations. We believe such a review will be sobering and reveal a company that makes hollow commitments to the financial institutions at which it seeks support, and then only shirk its obligations once loans are disbursed.

At present, and due to Barrick's systematic non-compliance of national and international law, and due to its failure to meet basic minimum standards for social and environmental protection, we consider that no bank that is a signatory to the Equator Principles, should consider providing any financing whatsoever to Barrick Gold for either its Pascua Lama or Veladero projects.

Requests to Export Development Canada (EDC) and US Export Import Bank (EXIM Bank):

1. *That EDC and EXIM BANK commit to fully review due diligence compliance by Barrick Gold of all applicable laws and standards, including:*
 - a. *EDC's and EXIM Banks' internal social and environmental safeguards;*
 - b. *International Human Rights Law and Environmental Agreements*
 - c. *Inter-American Human Rights Law and Environmental Agreements*
 - d. *Argentine and Chilean National Laws*
 - e. *Applicable International Treaties on Indigenous Peoples and Labor*
 - f. *International Standards as Concerns Protected Areas*
 - g. *IFC's Performance Standards*
 - h. *The Equator Principles*
 - i. *UN Framework and the Guiding Principles on Human Rights and Business*
2. *That EDC and EXIM Bank make all due diligence procedures and steps public and transparent, guaranteeing full participation of stakeholders and communities at the appropriate steps of the due diligence review;*
3. *That EDC and EXIM Bank publicly reveal all pertinent information concerning the nature and eventual structure of the requested investment support by Barrick Gold;*
4. *That EDC and EXIM Bank provide a formal channel of redress with clear procedures for, information collection, and complaints that might be submitted to the financial institutions regarding the Barrick proposed investment;*
5. *That, given the extreme controversy surrounding the Barrick's Pascua Lama investment that EDC and EXIM Bank provide a final public consultation period should either bank decide to recommend investment to its Board of Directors;*

We are available for any and all consultations, and any assistance we might provide regarding the information and evidence presented here as well as steps forward to address this conflict.

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ANNEX:

(Unofficial Translation of Barrick's Glacier Management Plan)

PASCUA LAMA PROJECT

MINERA NEVADA COMPANY

GLACIER MANAGEMENT PLAN IN THE RIO EL TORO BASIN

1 Introduction

The following plan describes the method and management disposition of the glaciers sectors that must be removed during the life of Pascua Lama, as the open pit area is extended towards the position of the glaciers in the Rio El Toro river basin. It is estimated that 10 hectares of glaciers must be removed and adequately managed to avoid the instability of slopes and environmental impacts. The thickness of the glacier sectors that must be removed is estimated at 3 to 5 meters.

2 Management Plan

- 2.1 The glacier sectors that must be removed will be determined with the necessary anticipation according to the updated mining plan.
- 2.2 The mining equipment shall be employed as needed for each glacier sector to be managed (basically bulldozers and/or r front loaders).
- 2.3 The chunks of glaciers shall be removed with the mentioned machinery until the surface is clear (principally rock).
- 2.4 If necessary, controlled explosives shall be used, of small size, to remove the ice.
- 2.5 The chunks of ice that come apart and that are removed, until the level of the terrain is reached, shall be "pushed" or transported by the same mining machinery to an adjacent area, nearby but outside of the boundaries of the development of the pit.
- 2.6 The areas of disposal shall comply with the Basic characteristics cited in Section 3 below.

3 Characteristics of the Sites for Disposal

The sites for disposal of the chunks of glaciers shall comply with the following basic conditions:

- 3.1 They shall be located at a similar or slightly lower altitude than their original position.
- 3.2 They shall not be destined to other works, infrastructure, or project development, nor shall they compromise the safety of these if they are located downstream of the pit.
- 3.3 Preference shall be made for sites of low inclination, to minimize the possibility of downslope shifting. In the pit vicinity there is ample relative level terrain to dispose of the glacier chunks.

- 3.4 Notwithstanding the above, retention walls (bermas) shall be introduced and/or machinery shall level the terrain at the extremes, "downstream", to retain eventual ice collapse and avoid downslope slippage.
- 3.5 No gorge floors shall be used or sectors that might present significant surface water flow during the periods of ice melt.
- 3.6 The characteristics of the terrain or rock surface shall be similar to original sites (prioritizing the same geological formations and geomorphological configuration).

4 Responsibilities

- 4.1 The definition of the glacier sector removal program, shall be incorporated to the mine development plan.
- 4.2 The specific Departments in addition to the Departement of Health, Safety and Environment, shall participate in the definition of the sites for glacier disposition, which shall approve the determined sites.
- 4.3 The Department of Health, Safety and Environment shall supervise the loading, transport and final disposal of the glaciers.
- 4.4 The monitoring of the safety conditions of the glaciers shall be informed frequently to the Management of the project and to the competent authorities.

5 Advantage of the Methods

The method previously described has the following advantages:

- 5.1 The controlled method permits minimizing the removal of glaciers to the least necessary, according to the advancement of the pit.
- 5.2 The chunks of glaciers removed shall be positioned similarly to their original position and basically within the same basin, minimizing the hydrological effects.
- 5.3 No acid water problems are generated (or accentuated) due to the meeting of the chunks of ice removed.