

**False Fears:  
The Expiration of the Antarctic Mining Ban**

Ryan Kostusiak

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Lisa Glidden

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## **Introduction:**

Located on the bottom of the globe, the Antarctic continent has often been shrouded in mystery. Antarctica is imagined as a white void, with no discerning physical features stretching out towards the horizon. It is cloaked in miles upon miles of snow and glacier. With extremely high wind speeds and the coldest temperatures anywhere on the planet, it is mainly thought as an inhospitable wasteland besides the handful of inhabitants being penguins and the occasional scientist. The landmass is often excluded when it comes to international politics and multilateral talks. Part of this has to do with the fact that many find little worth in such a barren land, many even find it hard to believe that there is any land to begin with. And at a glance, you can not necessarily blame them.

However, deep beneath the thousands of feet of ice, it is made up of rock and stone just like the rest of them. Given this fact, there is suspicion and interest in Antarctica for the wealth it may possess, in the form of crude oil and valuable minerals. This interest is not just limited to companies looking to make a quick buck by being the first to break the ice. Countries have taken a direct interest in the continent, including powerful adversaries such as China looking to expand their operations on the mainland as well in the surrounding Southern Ocean (Perlez and Huang 2015). The United Kingdom also has a continuing presence in the region, as a way to project their power into the area surrounding South Georgia and the South Sandwich Islands (Dodds and Hemmings 2013). This is not the first time this has happened, during the height of the Cold War the United States and the Union of Soviet Socialist Republics both had a strategic interest in the landmass. This in turn has led the world to develop a series of treaties and regulations for the southern continent entitled the Antarctic Treaty. The Antarctic Treaty was initially intended to prevent a geopolitical conflict in such an inhospitable environment but its interest has been

progressively shifting towards protecting that very environment (The Antarctic Treaty 1959). This initially led to many practices on the continent to be regulated or outright prohibited altogether, including the interest of this paper; mining.

I came into this analysis with a fear that one day Antarctica would be unrecognizable from the way we see it today. Not necessary through the means of a changing climate, we know that the ice sheets will melt with time (Gillis 2016). What I am referring to is what the original developers of the Antarctic Treaty feared as well, that the continent would become the battleground and source for conflict. With a surface level look at the Antarctic Treaty, one will come across claims of an inevitable expiration of a protocol that bans all mining on the continent. Precious minerals and black gold in an ungoverned landscape just seemed like a disaster waiting to happen. With the large players already with interest in the region, I was sure that this was a certain outcome. However, through all my findings I could not find anything definitive on the existence of a moratorium or not. Further, the Antarctic Treaty appears to be a fairly powerful system of international governance, with numerous failsafes and resilient provisions in place. Overall, the culmination of these findings has led me to conclude that the threat of a conflict over mining on the White Continent is slim, as regardless of what is being stated again and again, there is no true expiration on the ban on mining. If anything, what will strengthen the Antarctic treaty the most in this regard is something more along the lines of an information campaign to spread word of its strength and discourage any who would wish to go against it and ruin the lands of Antarctica.

This essay will begin with a discussion as to the wealth that may reside within Antarctica to start to explain why there is so much of an interest here. Following, there will be an explanation of how Antarctica is currently governed and what this has to say about mineral

extraction. Afterwards, I will delve into this myth of a mining ban and what will actually occur in 2048. Finally, I will touch on the resilience of the treaty and how the misinformation about it may be harmful to its longevity.

### **Riches Beneath the Ice?**

Regardless of how Antarctica may appear on the surface, just a gigantic ice sheet, it is still a continent in the true sense of the word. And with it being a continent, it comes with all the mineral benefits. The question remains though: what does lie beneath the ice?

The answer to this question is a tricky one and primarily based on assumptions. The United States Office of Technology Assessment has previously reported that “there are no known oil, gas, or mineral deposits in Antarctica of commercial value” (Ward 1998, 371). However in the same report, it was stated that there was an almost definite possibility that oil does exist in the Southern Continent and that sources could possibly be found both beneath the ice and on the continental shelf (Ward 1998, 371). The important distinction here is that of these two potential sources for oil, the oil beneath the seabed will most likely be the easier one to access (Ward 1998, 371). As of writing this, no sources of oil on the continent have been discovered, but estimates vary drastically from 50 billion barrels of oil to over 200 billion (Ward 1998, 372). This could make drilling in the region economically viable, especially as we continue to drain previously discovered oil deposits.

There is also some evidence for the existence of rare earth minerals in Antarctica. A Russian study uncovered geologic similarities between the Antarctic Shield and other formations in the Balkans and Siberia (Belyaev 2012, 368). Given that these regions have deposits of rare metals such as apatite, there is reason to suspect that apatite may be present within Antarctica as

well (Belyaev 2012, 369). This would become another potential source for industrialization on the continent (Belyaev 2012, 369). It could be once again spurred on due to the rarity of this element.

But the elephant in the room remains: while we have reason to suspect the existence of these deposits, none have been discovered just yet. Further, due to the way that the White Continent is governed, it makes these resources incredibly difficult to tap.

### **The Antarctic Treaty**

Unlike the vast majority of the rest of the world, there are no real backed claims of land ownership. This is by design underneath the Antarctic Treaty. The Antarctic Treaty is the primary document for the governance and oversight of Antarctica (The Antarctic Treaty 1959). Its first objective is to ensure peace on the continent, as any major conflict would be incredibly difficult and deadly to deal with. As such, it prohibited most military action and directed the focus of the continent towards a more scientific direction (The Antarctic Treaty 1959). The original treaty, which is only 12 pages long, sets up the basic structures imagined to govern the continent today, with measures on how to deal with disagreements and how to amend the treaty, as well as more specific points such as the banning of nuclear weapons or testing on the continent and how nations should inform other signatories of any expeditions heading for this polar world (The Antarctic Treaty 1959). Interestingly, there was no mention of anything regarding minerals, mining, or extraction of any sort, so there was not an answer to how these resources were to be governed.

One of these measures was particularly of interest to me though, being Article IV. Under this, it essentially puts the preexisting land claims on Antarctica into a stasis. Any claims that

have been made previously are still in place, as the treaty specifically states that they are not renounced (The Antarctic Treaty 1959). However, any of the treaty's signatories can no longer assert or enforce their claim in any way, nor can any new claims be made or enlarged (The Antarctic Treaty 1959). All in all, it states that while you can still keep your claim, you have no power to make that claim a reality, they are in a practical sense dead. When beginning my research into mining and extraction, I was sure that there would be conflict stemming from this specific article. If a country could not enforce its claim, what could they do about foreign powers performing operations in their claims? Military action was off the table but surely this conflict of interest would lead to the demise of the treaty system.

This was until I began to uncover mentions of something that would prevent this from occurring, a ban on mining operations and extraction on Antarctica. However, most mentions of this mining ban mentioned an expiration date, one that I could not find myself.

### **The Legendary Mining Ban and its Expiration**

The first mention of any prohibition on mining and mineral activities that I came across came from the Protocol on Environmental Protection to the Antarctic Treaty. This protocol cemented the role of Antarctica as an environment reserve and reasserted the importance of peace and science in the governance of the polar continent (Protocol on Environmental Protection to the Antarctic Treaty 1991). Throughout the course of the document, it states how any action on the continent that may lead to detrimental effects on the environment are to be either planned with the coordination of the other parties or avoided altogether (Protocol on Environmental Protection to the Antarctic Treaty 1991). Certain measures had to be in place, such as the existence of technology that can allow for “environmentally safe operations”

(Protocol on Environmental Protection to the Antarctic Treaty 1991). As one might be able to suspect this makes mining or any other similar industries such as refining, manufacturing, etc. extremely difficult to do legally in the treaty area.

But this treaty goes one step further, it provides an entire article dedicated to this topic titled Article 7 Prohibition of Mineral Resource Activities. This is just a single sentence but is entirely clear in its purpose: “Any activity relating to mineral resources, other than scientific research, shall be prohibited” (Protocol on Environmental Protection to the Antarctic Treaty 1991). Based solely on this statement alone, unless what you were doing was for a study of some sort, there is a complete ban on any commercially viable mineral extraction by default. That would be the case, if it were not for Article 25. This portion of the document is focused on the amendment of the protocol and section 5 states that while mineral extraction activities are banned, states could work together to develop a legally binding regime to control these on the continent (Protocol on Environmental Protection to the Antarctic Treaty 1991). So while these activities are prohibited, they could be allowed if states could agree on a way they could be done while still respecting the environment.

Following this, I began to find mentions of a mining ban, of what appeared to be another document that dealt with mineral extraction and nothing else. If this was the case and there was a definitive regime that governed and regulated these processes in Antarctica, that means that the portion on mining in the Protocol on Environment Protection would be superseded. The information I was finding was misleading though.

In a document recalling the talks of the United Nations General Assembly, there was mention of both the protocol and this mining ban. Discussed was how the protocol lacked any enforcement mechanism for those who went against the regime (Sixtieth General Assembly

2005). Furthermore, it mentioned a moratorium on mining that expires in the year 2048 (Sixtieth General Assembly 2005). The general consensus was that once this deal expired, countries should move towards securing a permanent ban on mineral extraction in Antarctica (Sixtieth General Assembly 2005). However, this was not the only occurrence of a claim of expiration. A resolution proposed in Santiago was focused on reaffirming members' support of Article 7 of the Environmental Protocol (Secretariat of the Antarctic Treaty 2016). This document also addressed the claim that the mining ban expires, but in a different light. It states the following,

Taking into account that outside the Antarctic Treaty system there are many in the public and media who incorrectly believe that the Protocol expires in 2048... Recalling that in accordance with its Article 25, the Protocol does not expire in 2048... (Secretariat of the Antarctic Treaty 2016)

This statement adds to the confusion we have already run into, which is how so many believe that there actually is an expiration of the mining ban. It may make sense for an individual such as myself not knowing about the lack of an expiration, but for this myth to be mentioned within the UN General Assembly is rather strange. If these are some of the people chosen to govern and conduct policies on the continent, you would expect them to know when this expires or not.

Following this, I decided to look back at the Protocol. But on inspection, one can see that there is no actual mention of an expiration of the mining ban (Protocol on Environmental Protection to the Antarctic Treaty 1991). Not just that, there is not any mention of an expiration at all within the Protocol, the document seems as though it will remain in place for as long people choose to follow it (Protocol on Environmental Protection to the Antarctic Treaty 1991). I thought that possibly, those at the UN must have gotten this from somewhere, this is such a specific date to continuously reiterate.



In fact, I am not sure if there is a reason. The only other possible area for confusion would be the previously utilized Convention on the Regulation of Antarctic Mineral Resource Activities. This was the primary document for the governance and regulation of these kinds of actions on the continent until the adoption of the Protocol on Environmental Protection. However, the Convention was adopted in 1988 and was shortly replaced by the protocol only a few years later (Secretariat of the Antarctic Treaty 1988). Many of the principles that it had are very similar to the ones we see today with the current Protocol, as it effectively banned mining and ensured the protection of the environment before anything else (Secretariat of the Antarctic Treaty 1988). And in much of the same way, this Convention made no mention of an expiration (Secretariat of the Antarctic Treaty 1988). So somewhere along the way, this myth was adopted and just accepted as fact, although there really is not any evidence in any of the primary treaties relating to Antarctica.

As far as anyone is able to tell, the mining ban which is built into the Protocol is here to stay. Without an expiration date, the only thing that could allow for the unregulated mineral extraction and exploitation of Antarctica would be if this was made into a regime of its own.

### **Resilience in Antarctic Institutions**

As can be seen, the treaties and institutions developed to address the contested issue of mining and drilling in Antarctica are often fairly complex and overlapping. One might be able to assume that this comes from years of treaties being built upon the work of the previous ones and as our interest in the continent has expanded and our technology has improved, our institutions had to be updated to keep up. Like multiple layers of paint on an old house, you can see where

the cracks in the layers below were covered up. For Antarctica this means that there are numerous failsafes in place in case one institution fails or can not cope with the issues at hand.

Even if the mining ban were to expire, this would not spell the end for Antarctica. There would not be a new age of a modern gold rush as states attempt to reinstate their claim or tap into the abundant resources before others were to get to them. There would be no conflict as there would still be no mining. Chances are, if the ban were to expire, Article 25 of the Protocol would prevent any real change from occurring, as without a replacement, Article 7 would continue to be in place (Secretariat of the Antarctic Treaty 2016). Even if those did not work, there is still the mining Convention enacted a few years prior to the protocol that could still take its place, being a temporary replacement in a sense. Although we know this is not going to occur, it goes to show the strength of certain international institutions that are built strongly and with numerous backups.

What is most threatening to the Antarctic Treaty system is less so faulty institutions, it is more so how well known its policies are. There can of course be more back up plans created, but that of course takes time, planning, and money which is generally unnecessary in this instance. What is threatening is when policy makers are not aware of the rules and regulations that have already been set in place, even more so when they are unaware if they expire or not. This works two ways. In the instance of the UN General Assembly members, they believed that the mining ban was going to expire. In response, they promoted the notion of passing a permanent ban on resource extraction, something that already effectively exists (Sixtieth General Assembly 2005). However for China, its interests lie in the resources and possible economic benefit they may gain from possibly investing in the area (Perlez and Huang 2015). Regardless, it has to be made

known that there is no expiration for the Protocol, it is here to stay for as long as we allow it to be.

## **Conclusion**

It is unlikely that as of this point the degradation of the pristine environment of Antarctica through mineral extraction and mining will ever occur. Although there are reports of resource wealth on the continent, there have been no known deposits to be found. Even if they were to be found, countries could not lay claim to them or the land in which they are found, as under the Antarctic Treaty, the assertion of claims or the creation of new claims is practically impossible as they can not be backed by any means. This is the main governing document of the continent and has held firm for 60 years as of this point. Additionally, the Protocol provides the final nail in the coffin, banning any instance of mining or resource extraction unless it is for scientific purposes. Despite what many may report or say, there is no true expiration date built into the Treaty, Protocol, or any related governing document. This is strengthened additionally through the various built in backups to these treaties that allow for flexibility and resilience.

While these treaties are strong, misinformation may be their downfall. If it becomes common knowledge that these regimes “expire” or have an end date, countries will begin to make plans to expand their interests in the region and might possibly follow through with them. The Antarctic Treaty has been sturdy for years, putting peace, the environment, and scientific research at the forefront. And for the most part, it has done a good job at that. In order to keep it this way, nations have to know that it is not going away anytime soon and that there will be consequences if signatories go back on their word to protect one of the world’s last untouched wildernesses.

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