# Mining vs. the Environment: Does Namibia need another Uranium Mine?

By

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The Legal Assistance Centre is a non-profit public interest law centre. One of the LAC's several focuses, the Land, Environment, and Development Project (LEAD) conducts research on issues relating to land rights, land use and management. Further, as a human rights organization, the LAC produces comments on issues of public interest.

Presently, LAC is investigating the proposed construction of the Langer Heinrich Uranium Mine in the Namib Naukluft National Park, near Swakopmund. The issues surrounding this proposal are many. Firstly, the proposed area lies within a national park. Secondly, the proposed area is an environmentally sensitive desert region, where the rate of ecological recovery is extremely slow. Thirdly, there exist worries regarding increased water consumption, necessitated by both the construction and operation of the proposed mine, in an area that is already potentially heading towards a severe water shortage. Finally, there are concerns, harbored by both the LAC and other interested parties, that the process through which a mining license is obtained may be fundamentally flawed.

This piece deals primarily on the final issue noted. It examines the general process through which a company obtains a mining permit in a protected area, and the relevant laws and policies that shape this process. As a comparative tool, the study will also examine equivalent procedures in the United States. Like Namibia, the US possesses great mineral resources, but must struggle with the competing interests of

mineral extraction and environmental conservation. Because the US has both an extensive network of federally protected lands, and a voracious appetite for the consumption of resources, it provides a useful measuring stick for determining the efficacy of Namibian policy.

## **Controlling Namibian Legislation**

There are actually very few laws that control the process of application for a

mineral license. The relevant laws are as follows:

## Constitutional:

## Article 95 of the Constitution of the Republic of Namibia (1990) states:

The State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at the following (I) maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future; in particular, the Government shall provide measures against the dumping or recycling of foreign nuclear and toxic waste on Namibian territory.

## Article 101 of the Constitution of the Republic of Namibia (1990) continues:

The principles of state policy contained in this Chapter shall not of and by themselves be legally enforceable by any Court, but shall nevertheless guide the Government in making and applying laws to give effect to the fundamental objectives of the said principles. The Courts are entitled to have regard to the said principles in interpreting any laws based on them.

#### **Binding Legislation:**

The **Minerals (Prospecting and Mining)** Act of 1992, Section 91(f) requires that any application for a mining license shall include

(i) the condition of, and any existing damage to, the environment in the area to which the application relates;

(ii) an estimate of the effect which the proposed prospecting operations and mining operations may have on the environment and the proposed steps to be taken in order to minimize or prevent such effect; and

(iii) the manner in which it is intended to prevent pollution, to deal with any waste, to safeguard the mineral resources, to reclaim and rehabilitate land disturbed by way of the prospecting operations and mining operations and to minimize the effect of such operations on land adjoining the mining area.

There is, however, no mention of any separate procedure required for the acquisition of a mining license in protected areas.

Section 52(1(b(iii))) is the only part of the act that would potentially restrict the acquisition of a mining license in a protected area. It reads:

The holder of a mineral license shall not exercise any rights conferred upon such holder by this Act or under any terms and conditions of such mineral rights . . . in, or under any . . . land used or reserved for any governmental or public

purpose, and otherwise in conflict with any law, if any, in terms of which such . . . . land has been established . . . or is otherwise regulated, without prior permission of the Minister granted, upon an application to the Minister in such form as may be determined in writing by the Commissioner, by notice in writing and subject to such conditions as may be specified in such notice.

The **Nature Conservation Ordinance (No. 4 of 1975)**, Section 18(1(d)) states that "(N)o person shall without the written permission of the Executive Committee . . . willfully or negligently cause . . . any damage to any object of geological, ethnological, archeological, historical or other scientific interest within a game park or a nature reserve."

#### Non-Binding Legislation

The Environmental Assessment Policy (1994) provides a list of activities, which, "whether initiated by the government or the private sector, should be subjected to the established EA procedure as set out in [the policy]."

Additionally, the policy lists that, relevant to its Environmental Assessment Policy, Namibia shall place a high priority on, among other things,

maintaining ecosystems and related ecological processes, . . . maintaining representative examples of natural habitats . . . [and] maintaining maximum biological diversity by ensuring the survival and promoting the conservation in their natural habitat of all species of fauna and flora, in particular those which are endemic, threatened, endangered, and of high economic cultural, educational, scientific and conservation interest.

The Policy for Prospecting and Mining in Protected Areas and National Monuments (1999) says the following about granting mining licenses in such areas:

<u>Granting of [Exclusive Prospecting Licenses and Mining Licenses]</u>: Is generally permitted in Protected Areas and National Monuments . . . except areas within parks and monuments, which are particularly sensitive or are of special ecological or touristic importance. Each application would be considered on a case by case basis.

The Policy further states that

A full EA will usually be required for any prospecting or mining in a Protected Area and/or National Monument. The EA shall be conducted according to the procedures as stated in the Environmental Management Act. Should the [Minerals (Prospecting and Mining Rights) Committee] agree to recommend approval (after reviewing the EA) an Environmental Management Plan and an Environmental Contract shall be concluded before prospecting or mining may commence.

#### Proposed Legislation:

The **Parks and Wildlife Management Bill** would require attainment of, and accordance with, written authorization from the Minister of Environment and Tourism. Such authorization would not be permitted unless (a) a detailed environmental assessment, allowing for sufficient public participation, was performed; (b) the Minister is satisfied that allowing the activity would not significantly prejudice the attainment of the management objectives of the protected area; and (c) the permit was subject to enforceable terms and conditions to safeguard against the risk of adverse effects and consequences relating to the proposed activity.

The **Environmental Management Bill** would make binding the submission of an Environmental Assessment as well as the procedures and governmental entities that would be involved in the receiving, reviewing, and decision making processes involving the Environmental Assessment.

## **Procedural Overview**

The acts and policies listed above outline a fairly simple process through which a prospective developer may obtain a mining license. Legally, the decision as to whether an applicant receives a mining license rests in the sole discretion of the Minster of Mines and Energy. The prospective developer must include in his application a summary of the current environmental situation of the proposed site, an estimation of the impact that mining would have on that site, and proposed methods for mitigating the adverse effects of the mining operation. This scope of the information required, however, does not legally have to reach that of an Environmental Assessment. The difference in scope between the summary that is legally required in the application process and that of an Environmental Assessment is significant. For example, the Minerals Act of 1992 does not require the identification of alternatives or the notification of affected and interested parties, as would an Environmental Assessment.

Additionally, if the mining is to take place in a protected area, written permission from the Minister of Mines and Energy is needed in addition to a license. Presumably, if the proposed area was fully enclosed within an existing protected area, the permission to mine in that area would be granted simultaneously with the mining license. If the protected area in question is located within a game reserve or nature reserve, the prospector would also need to obtain permission from the Directorate of Parks and Wildlife Management, which is the modern day equivalent of the Executive Committee referred to in Nature Conservation Ordinance of 1975 listed above. In other words, in order to legally mine in an area such as a national park or a game park in Namibia, a prospector needs only the permission of the Minister of Mines and the Directorate of Parks and Wildlife Management. No Environmental Assessment is required, and neither is any consultation with the surrounding communities.

In practice, the requirements are supposed to be more stringent than the minimum steps outlined above. The *Policy for Prospecting and Mining in Protected Areas and National Monuments* and the *Environmental Assessment Policy* both establish a procedure that asks for an Environmental Assessment. However, the language used differs significantly. The *Environmental Assessment Policy* states that "mining, mineral extraction and mineral benefication" are activities requiring an Environmental Assessment. The *Policy for Prospecting and Mining in Protected Areas and National Monuments* (passed a full 5 years after the *Environmental Assessment Policy*) states that a full Environmental Assessment will *usually* be required for mining in a Protected Area and/or National Monument. It is interesting that the requirements set out in the later policy concern lands that are of a much greater national interest, and yet the language requiring an Environmental Assessment is actually *softened*.

Regardless of the language used in these individual policies, it does appear to be common practice to require an Environmental Assessment to accompany any application for a mining license. Nonetheless, unlike an act of parliament, a policy has less binding power, and therefore it cannot be assured that an environmental impact assessment will be required of every applicant for a mining license. Though it was not a mining license decision, one needs look no further than the Ramatex situation to see the possible ramifications of such a loophole. On the other hand, it may be that the obvious impact of mining might prevent any exploitation of that loophole. The very act of mining involves the removal of large quantities of rock and soil. Consequently public sentiment may require greater diligence on the part of the authorities than in a situation such as Ramatex, where the major issue is the less visually obvious problem of pollution.

#### The Role of the Different Ministries in EA Process

The general framework of the process for allowing mining in a protected area is well delineated. The Minister must both grant a mining license and written permission for the prospector to use that license in the protected area. Depending on the nature of the protected area, the law also requires the signature of the Directorate of Parks and Wildlife, in order for any mining to occur. In most cases, a full Environmental Assessment is required of the applicant.

It is much more difficult to determine the finer points of the decision making process regarding the granting of a mining license. This difficulty arose as the result of two factors. Different ministerial bodies seem to have slightly different understandings, or at least different levels of candor, regarding the realities of the process. Secondly, there appears to be a general reluctance to discuss the process in public, even when the inquiry does not concern the particulars of any specific applicant. The willingness to talk seemed inversely proportional to the level of influence that the governmental body had in deciding whether to grant the mining license. For example, when the LAC contacted the Commissioner of Mines and Energy to set up an interview, he did so with seemingly great reluctance, only agreeing to the interview after first saying that he would be much more comfortable discussing the procedure for the granting of a mining license outside of a protected area.

#### **Ministry of Mines**

Legally, the MME is the most powerful Ministry involved in any mining related decision. According to the Mining Commissioner, an application for a mining license, along with any required submissions (EA, EMP, etc.) is reviewed by both the Minerals (Prospecting and Mining Rights) Committee (MPMRC) and the Mining Commission, which is headed by the Mining Commissioner himself. These two entities then make a recommendation to the Minister of Mines regarding the mining application, and the Minister then makes the final decision.

When asked, the Mining Commissioner stated that he was unaware of how the members of the MPMRC were chosen, because the current members of the Committee were already selected when he began working in the Ministry. He did, however, state that the MPMRC is comprised mainly of technical staff from the Ministry of Mines with representation from both the Ministry of Environment and Tourism and the Ministry of Finance. According to a spokesperson at the Ministry of Mines, the MPMRC is referred to in the Minerals Act as the "Minerals Board of Namibia."

The Minerals Act provides that the board must consist of eight individuals. The chairperson of the board is either the Minister or his designated proxy. There are two individuals nominated by the Chamber of Mines of Namibia (and appointed by the Minister), one of whom represents the interests of persons involved in prospecting operations, and the other represents the interests of persons involved in mining operations. The Minister appoints two other individuals, one of whom, in the opinion of the Minister, represents the interests of persons involved in small-scale prospecting operations, and other who, in the opinion of the Minister, represents persons involved in small-scale prospecting operations.

small-scale mining operations. The Minister also appoints the final three members of the board. The first is an individual who, in the opinion of the Minister, "represents the interests of the trade unions established in the interests of persons employed by holders of licenses issues under [the Minerals Act] or holders of mining claims." The other two members are persons employed within the Ministry of Mines.

Legally, the Minister has sole discretion in the make-up of the MPMRC, as it is now known. The only other influence on the MPMRC's composition is the Chamber of Mines' role in nominating two members. These members must still be appointed by the Minister, giving him, presumably, the potential to veto nominations. It does certainly appear that the board's recommendations will likely reflect the attitude of the Minister – or at least that of the Minister that was responsible for the majority of the appointments.

The outside representation, to which the Mining Commissioner referred, falls under Section 11(4) of the Minerals Act of 1992. This section allows the MPMRC to coopt with at most five individuals in order to assist it in the exercise or performance of its functions. Of these five persons, one each may be designated by the Ministry of Finance, the Ministry of Wildlife, Conservation, and Tourism, the Ministry of Fisheries and Marine Resources, the Minister of Health and Social Services, and the Ministry of Agriculture, Water and Rural Development. Alternately, the MPMRC may co-opt one person designated by any such Minister, if both the other Minister and the Minister of Mines determine that the person is needed.

The MPMRC may however only legally co-opt the representation from the other Ministries with the concurrence of, and under conditions determined in writing by, the Minister of Mines and Energy. More critically, none of the representatives from the other ministries may vote on the matter before the MPMRC. In other words, a representative from the MET may state to the board that a proposed mine is an ecological nightmare, but the representative will be unable to guarantee an influence on the decision of the Committee.

The minutes of the MPMRC's meeting concerning an application for a mining license are kept, in the words of the Mining Commissioner, "in the interest of transparency." Nonetheless, when asked where one could access these minutes, the Mining Commissioner explained that they were internal documents only. It may be that the minutes are available only after receiving permission from the Ministry to view them, but this information was not offered.

Again, it is crucial to recognize that the Minerals Act of 1992 is the only truly binding law governing the awarding of mining licenses in any area, whether protected or otherwise. The Policy for Prospecting and Mining in Protected Areas and National Monuments does create additional requirements, but they lack the binding force of an act. As it stands, there is no act that differentiates procedurally between mining in the Namib Naukluft National Park and mining next to a toxic waste dump.

The Commissioner stated that Ministry of Mines and Energy does not use any external sources when reviewing an applicant's Environmental Assessment. The Ministry uses its own personnel, which include environmental engineers and individuals with relevant knowledge. After reviewing the EA, the Ministry of Mines and Energy meets with the Ministry of Environment and Tourism to discuss any reservations that either side may have. With regards to the interplay between the Ministry of Mines and Energy and the Ministry of Environment and Tourism, the Mining Commissioner flatly stated that the MET lacks any sort of veto, even regarding mining in a protected area. He allowed that the MET has more input in such a situation, but he did not specify in what way the increased input would materially alter the application process. He did stress that the departments tried to reach a consensus on "what is good for Namibia."

#### **Ministry of Environment and Tourism**

According to Mr. Sikabongo at the Ministry of Environment and Tourism, ministries will attempt to reach a compromise, should any conflicts arise. Interestingly, however, he maintained that the Minister of the MET did indeed have a theoretical veto if the proposed mining were to take place within a sensitive area (the designation of areas as "sensitive" are made by the Permanent Secretary of the MET in consultation with the MME). If this veto does arguably exist, it would only be used in the most drastic circumstances.

Otherwise, the MET's stance is that its general opposition to mining in protected areas must be balanced against demands for development. As such, the MET will allow the mining to take place subject to certain conditions as outlined in an environmental contract with the licensee. Should the licensee fail to fulfill the requirements of the contract, the MET can, with agreement from the MME, terminate the license.

The final decision on the acceptability of the EA rests with the Permanent Secretary of the MET. This decision is kept on public record along with the Environmental Assessment. Permission from the MET is needed to access this decision. The MET will generally rely on the various Ministries' expertise to review an EA, rather than using external experts. If the EA exceeds the capabilities of a given Ministry, however, the MET will use external experts financed by the applicant.

The fact that the external experts are paid by the applicant seems a little alarming. The worry would be that the experts might not be the most impartial sources of information as a result of this policy, but it may well be that the MET chooses its external experts, and then requires the applicant to pay the final bill. If this is the case, there is likely much less chance of indiscretion on the part of any applicant.

#### The Directorate of Parks and Wildlife

Permission from the Directorate of Parks and Wildlife is legally required, pursuant to the Nature Conservation Ordinance (4 of 1975), in order to mine in any game park or nature reserve. Realistically, however, this mandate carries very little weight.

The Directorate of Parks and Wildlife is categorically opposed to any development in National Parks, but, as one member of the Directorate said, "[they] have to be satisfied with whatever decision is made." As such, the Directorate's signing of the MME's approval is little more than a formality.

At most, the Directorate of Wildlife can make the developer sign a contract in return for its approval, but even then the Directorate has no power to enforce the contract. The Environment Management Bill is expected to increase the actual influence of the Directorate of Wildlife, but for now it remains a non-factor.

#### **The National Monuments Council**

The National Monuments Council is in an even weaker position than is the Directorate of Parks and Wildlife in terms of input into the decision to grant a mining license in a protected area. The text of the Policy for Prospecting and Mining in Protected Areas and National Monuments states that the MPMRC, the MET, and/or the NMC must be consulted before any such decision is made. Perhaps because of the ambiguous "and/or," the inclusion of the NMC in the EA process seems to be little more than a courtesy.

The NMC does have a presence on a subcommittee that is involved in the process of granting mineral licenses. However, there appears to be confusion as to exactly what role the NMC as a body *could* play in the process. When asked about the role of the NMC in reviewing the Langer Heinrich Uranium Mine, the Mining Commissioner flatly stated that they were not involved at all. He claimed that the NMC deals solely with monuments, and nothing else.

A spokesperson for the NMC, however, stated that the NMC is involved whenever the proposal would take place in an archeologically sensitive area. This individual also stated that the South Strip, which includes the Namib Naukluft National Park, is classified as an archeologically sensitive area. To this individual's knowledge, however, the NMC had not yet received an EA for the Langer Heinrich proposal, despite the fact that the EA is under final review in both the MET and the MME. The pending Environment Management Bill is also expected to increase the influence of the NMC.

Interestingly, representatives from both the Directorate of Parks and Wildlife and the National Monuments Council suggested that the requirement of an Environmental Assessment is not as firm as claimed by the MME and the MET. When asked, both separately said that whether an EA is required depends on both the location of the development and the strength of the developer. The Environmental Management Bill will likely create a legal requirement for the submission of an EA along with any mining license application.

## **United States' Laws and Policy**

Perhaps because the United States of America is significantly older than Namibia, and has therefore had more time to generate environmental laws, it has far more laws that come into play regarding mining licenses. A proposal to mine anywhere would run into an alphabet soup of acronyms. At the very least, a new mine would have to comply with the Clean Air Act (CAA), the Clean Water Act (CWA), and the National Environmental Policy Act (NEPA), which requires an Environmental Assessment, or a more stringent Environmental Impact Assessment (depending on the situation), whenever the actions of the federal government will have a significant impact on the environment, either on its own or as part of a larger action. A licensee would, upon construction of the mine, then have to contend with the Resource Conservation and Recovery Act (RCRA), which regulates all solid wastes (defined to include most liquids and contained gases), the Comprehensive Environmental Response Compensation and Liability Act (CERCLA, better known as Superfund), which deals with the cleaning up of pollution under the "polluter pays" approach, and the Toxic Substances Control Act (TSCA). Additionally, depending on its proposed location, the mine may run afoul of the Endangered Species Act, which could legally prevent its construction altogether. There may also be more specific federal legislation that would pertain to the mining industry itself. Finally, there is likely to be applicable state laws with which the proposed mine will also have to comply.

The above laundry list of US federal legislation is a rather brief illustration of some of the laws that would impact an effort to develop a mine anywhere in the United States. Though important acts of legislation, for our purposes they are generally too specific for a US-Namibian comparison on the procedures for obtaining a mining license in protected areas. Nonetheless, the morass of laws is included because it illustrates the number of theoretical hurdles that an industry must overcome to obtain a mining license anywhere within the US. Though this comparison will deal solely with protected areas in the United States, I would argue that even areas outside of protected areas in the United States currently receive better environmental protection, due to the above legal restrictions and the resulting increased potential for citizen suits, than land that resides within a protected area in Namibia.

The issue at hand here, however, does not concern general Namibian environmental protection. Therefore, the most relevant area of the United States' policies and laws is that which coincides with laws regarding protected Namibian lands. For our purposes, US federally protected lands fall under two classifications, Wildlife Refuges and National Parks, each of which will be dealt with separately.

#### Wildlife Refuges

The principle mission of the Wildlife Refuge System in the US is to "administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats." Wildlife refuges are publicly owned, but public use of an individual refuge is allowed only insofar as it is compatible with the purpose of the refuge itself. Recreational uses in a refuge are given priority over all other types of public use, but the refuge manager must first decide that such recreational uses would not be incompatible with the mission of the refuge.

Wildlife Refuges in the United States are divided into two different units. The National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997, controls all of the wildlife refuges in the United States, except for those in Alaska. The latter are subject to the provisions of the Alaska National Interest Lands Conservation Act (ANILCA).

Alaska notwithstanding, there are two scenarios regarding mineral rights in wildlife refuges. Depending on how the federal government acquired the land contained within a given wildlife refuge, it will either possess all of the rights pertaining to the land, including the subsurface mineral rights, or the subsurface mineral rights will be retained by a third party at the time of federal acquisition.

If the federal government possesses the subsurface mineral rights, the ruling policy, set pursuant to the order of the Secretary of the Interior, is to not allow mining of any kind within the wildlife refuge. There exists one main exception to this policy, however. If a drilling operation on an adjacent land is draining a pool of natural gas or oil that exists at least partly under the federal lands, the federal government will act to preserve its interest in its mineral estate. As such, the federal government will either reach a deal with the extractor or will put down a well within the wildlife refuge.

Since no policy is truly binding, it is still possible for a mining license to be granted when the federal government owns the mineral rights within a wildlife refuge. In order to do so, however, the developer would need to convince several bodies as to the desirability of allowing the proposed mining activity. The most influential organization involved would be the Bureau of Land Management, which is the governmental entity in charge of managing the federal mineral estate. Any decision made concerning the leasing of mining rights to federal mineral holdings would first need its permission. Furthermore, the individual refuge itself would also be involved. In order to obtain permission from the refuge, the company would need to obtain permission from both the manager of the refuge, as well as his or her supervisor. Both would have to agree that the proposed activity was in concert with the overriding purpose of the refuge in question.

If the mining company were to obtain all of the necessary signatures, it would have to supply, at minimum, an Environmental Assessment (the more likely scenario would require the more stringent Environmental Impact Statement). Furthermore, an agreement would be reached with the federal government regarding the share of the royalties that the government would receive from the mining activities.

If the federal government does not own the mineral rights that accompany the surface rights, the scenario changes significantly. The Fifth Amendment of the United States Constitution provides that private property may not be taken for public use without just compensation. Therefore, the federal government may not prevent any person from exploiting a valid mineral claim within a wildlife refuge. But because the federal government holds the surface rights, the mineral rights owner does not gain unfettered access. The bylaws surrounding the creation and purpose of the wildlife refuge require that the owner of the mineral estate negotiate the conditions of a permit with the manager of the wildlife refuge. As long as it is ensured that the developer is able to access the mineral estate, the manager of the wildlife refuge may, in the words of the Acting Chief of the Division of Natural Resources, impose any restrictions it wants in the permit.

As mentioned above, wildlife refuges in Alaska are controlled by ANILCA. ANILCA requires that Alaska wildlife refuges are to be managed according to the laws as set out in the National Wildlife Refuge System Administrative Act and its amendments. Generally, any activity that is proposed to occur within an Alaskan wildlife refuge would first require a finding that the activity was in accordance with the purpose of the refuge itself. There are, however, a couple of notable differences between Alaskan wildlife refuges and those contained within the rest of the United States.

ANILCA allows for what it terms "subsistence uses." Though for our purposes it is not relevant, the act recognizes the long standing hunting practices of local Alaskan population, and the lack of other alternatives for viable foodstuffs and other items gathered from fish and wildlife. Therefore, the act allows fishing and hunting to the extent that it will provide for a continuation of a traditional way of life, including bartering and "customary trading."

More importantly for this study, ANILCA also contains a section titled "Title X -Federal North Slope Lands Studies, Oil, and Gas Leasing Program and Mineral Assessments." This section required the Secretary of the Interior to carry out a study on an area of federally owned lands in Alaska in order to

(1) assess the potential oil and gas resources of these lands and make recommendations concerning future use and management of those resources including an evaluation of alternative transportation routes needed for oil and gas development; (2) review the wilderness characteristics, and make recommendations for wilderness designation, of these lands; and (3) study, and make recommendations for protection of, the wildlife resources of these lands.

Included in the land specified in this section is the Arctic National Wildlife

Refuge (ANWR). Regarding this refuge, ANILCA requires that the Secretary,

in consultation with the Governor of the State, Native Village and Regional Corporations, and the North Slope Borough within the study area and interested persons, shall conduct a continuing study of the fish and wildlife (with special emphasis on caribou, wolves, wolverines, grizzly bears migratory waterfowl, musk oxen, and polar bears) of the coastal plain and their habitat. In conducting the study, the Secretary shall-- (A) assess the size, range, and distribution of the populations of the fish and wildlife; (B) determine the extent, location and carrying capacity of the habitats of the fish and wildlife; (C) assess the impacts of human activities and natural processes on the fish and wildlife and their habitats; (D) analyze the potential impacts of oil and gas exploration, development, and production on such wildlife and habitats; and (E) analyze the potential effects of such activities on the culture and lifestyle (including subsistence) of affected Native and other people.

Despite the language requiring the analysis of the oil potential of the ANWR, ANILCA also stipulates that "[p]roduction of oil and gas from the Arctic National Wildlife Refuge is prohibited and no leasing or other development leading to production of oil and gas from the range shall be undertaken until authorized by an Act of Congress." This language is critical, since an Act of Congress, before it is passed, must secure a majority vote from both the House of Representatives and the Senate before then being approved by the President.

Previous attempts to open up the ANWR to drilling were stymied by this process. The proposed Energy Policy Act of 2005 includes a section entitled "Title XXII – Arctic Coastal Plain Domestic Energy" which would require the Secretary to lease oil and gas rights within the ANWR. The legislation is currently under review in the Senate.

ANWR is an obvious exception to US' stance on mining in wildlife refuges. As opposed to the categorical policy against mining and drilling displayed within other wildlife refuges, the US is potentially on the verge of opening areas of the reserve to commercial oil drilling. Nonetheless, the language in ANILCA requiring that an Act of Congress is required before such a decision can be reached does have important ramifications. The nature of passing any act through Congress means that the general public has ample time to get involved. Currently, there is a veritable maelstrom of public debate and intervention surrounding the proposed legislation. Because the decision must be made through normal political channels, interested citizens and non-profit organizations (as well as proponents of the legislation) can all try to bring political pressure to bear on key members of Congress.

## **National Parks**

Whereas the primary purpose of a wildlife refuge is for the conservation of species and habitat, the motivation behind the National Park System is that of public use and enjoyment. Whereas recreational activities are only allowed on a wildlife refuge if they are consistent with the mandate of the wildlife refuge itself, a national park must be inherently recreational in nature. Otherwise, the National Park System has a similar mandate of conservation. In fact, with regards to allowing mining, the National Parks are subject to even greater restrictions on mining than are wildlife refuges.

National parks are similar to wildlife refuges in that they must recognize existing mineral claims that reside within the park. Before receiving access, however, the developer must submit a plan proving ownership of the mineral estate, the method through which the proposed extraction will take place, and the impact that this activity will have on the surface. The National Park Service additionally must prepare an Environmental Assessment because of NEPA. Though NEPA usually only requires an EA if a federal action will result in a significant impact on the environment, allowing an individual to access her mineral rights is considered to be a federal action in this instance because of the impact the access will have on the government's surface rights and applicable federal laws. Interestingly, even if a mineral claim is accessed through directional drilling, such that the surface estate within a national park is not affected, the

National Park Service must still prepare an EA in order to inform the general public about the activity.

By virtue of the US Constitution, the mineral rights holder possesses a powerful right of access to the National Park in which the right exists. However, federal law reigns supreme in the US, and as such trumps the individual right at issue. "Reasonable access," therefore, is interpreted as being what is necessary to protect federal resources. All actions allowed by the holder of the mineral claim are considered against this measuring stick.

When the mineral rights are federally owned, access becomes even more restrictive. With the exception of several parks, which are so designated through the wording of the bylaws through which they were founded, all federal mineral rights are legally withdrawn from disposal laws. In other words, unless explicitly excepted within the individual park's charter, no one may legally lease federal mineral rights resting within a national park. The law responsible for this withdrawal, the Mineral Leasing Act, also impacts any new lands acquired as national park land. If the lands acquired include the subsurface mineral rights, these new rights are automatically withdrawn.

#### **Comparison of Namibian vs. US Policy**

The difference between Namibian and US policy is striking. Though the US has different policies regarding national parks and wildlife refuges, the overall approach is clear. Unless an express exception is made in the creation of the protected area, the US' firm stance is to refuse access to any federally owned mineral estates within that protected area. Furthermore, within the national parks themselves, unless the individual park's charter states otherwise, all federally owned mineral rights may not legally be leased.

The motivation behind these protections seems to be recognition that there is an inherent cost in the opening up of certain areas to mineral extraction. National parks and wildlife refuges were selected and created with a certain purpose in mind. Whether the purpose was the preservation of a particularly beautiful area for human enjoyment, or the preservation of a unique habitat or species, the creators of the Wildlife Refuge System and the National Park System likely felt that, in most cases, no amount of potential mineral wealth could overcome the gains created through protection of the land's surface.

Namibia's approach to protected areas seems to be more economically based. In its introduction, the Policy for Prospecting and Mining in Protected Areas and National Monuments reads "Namibia's parks are the foundation of the country's fastest growing industry, namely tourism. Government must therefore ensure that short-medium term projects (e.g. mining) do not jeopardize the potential for long-term sustainable development (e.g. tourism)."

It would be naïve to compare the United States and Namibia without recognizing critical differences between the two countries. The US is one of the world's superpowers. Its infrastructure, economy, and annual budget far exceed that of the majority of nations in the world, including Namibia. The United States will therefore suffer far less than would Namibia from the economic effects of closing off access to mineral reserves. Namibia, on the other hand, is country that only recently gained its independence. It is a developing country that must be able to attract industry in order to strengthen itself economically. A decision to close off protected areas to mining would have to be carefully weighed against resulting loss of revenue – revenue that will likely find its way to a regional competitor.

Still, it seems that Namibia's current approach offers protected areas protection in name only. Namibia's protected areas, much like the protected areas in the United States, were designated as such because they are inherently unique in some way. Whether it is because of geography, historical significance, or indigenous flora or fauna, these areas offer something which the rest of Namibia cannot. The decision to designate them as protected areas resulted from a feeling that they, or what they contain, should be preserved. Consequently, allowing mining in such an area (an activity which is destructive to the surface of the land, no matter how carefully done) should only be allowed after painstaking decision making.

Rather than allowing mining or prospecting only when the benefit is exceptionally persuasive, Namibia's policy appears to be the exact opposite. The Policy for Prospecting and Mining in Protected Areas and National Monuments expressly states that Exclusive Prospecting and Mining Licenses are *generally permitted* within Protected Areas and National Monuments unless the areas are particularly sensitive or are of special ecological or touristic importance. Bear in mind that the areas designated as "particularly sensitive or . . . of special ecological or touristic importance" already reside

within land deemed sufficiently sensitive or of sufficiently special importance to be classified as a Protected Area or National Monument. In other words, the area of land that is not considered generally open to mining is extremely small.

Additionally, the legally required steps which an individual wishing to mine in a protected must take, do not differ from those facing one who wishes to mine anywhere else in Namibia. Though public pressure and the integrity of government officials would likely dictate otherwise, legally a prospective miner would not even need to complete an EA before receiving permission to mine in the middle of Etosha National Park. Furthermore, currently the National Monuments Council and the Directorate of Parks and Wildlife, two parties that would arguably have the greatest interest in preventing the issuance of mining permits in protected areas, have little to no voice in the decision making process. Hopefully, the Parks and Wildlife Management Bill and the Environmental Management Bill will ultimately address the problems outlined in this chapter. Until that time, these problems remain a very real issue.

Even from an economic standpoint, greater consideration should go into the granting of mineral licenses within protected areas. Granted, Namibia no longer would allow a mining area to go un-rehabilitated after the mining was finished. Nonetheless, some areas that are apparently not considered "particularly sensitive" or of "special ecological or touristic importance" may be effected for centuries. In the Namib Naukluft National Park, lichen (the primary ground cover) grows at a rate of less than one millimeter a year, meaning that recovery from any surface damage is extremely slow. One can still see decades old oxcart tracks, as well as the 1915 campsite of World War I

German soldiers. Yet neither of these disturbances can remotely approximate the disturbance that will be left by a mining operation.

Certainly the area in which the proposed Langer Heinrich Uranium Mine will take place is no longer virgin ground. Years of prospecting in this area mean that mankind's touch will already be felt for decades, if not centuries. Nonetheless, site specific and policy concerns remain. A full fledged mining operation will require increased electricity, water and road infrastructure, all of which will have lasting effects on the surrounding environment. Also, citizens' concerns regarding increased water consumption and the potential of radiation exposure must be addressed.

Most importantly, even if the ecological footprint of this mine is justified by its economic importance, what safeguards are in place to ensure that other proposals must be of such economic importance? The Policy for Prospecting and Mining in Protected Areas and National Monuments recognizes the importance of tourism in Namibia. It maintains that short and medium term mining projects must not be allowed to jeopardize tourism as a long term, sustainable industry. In areas such as the Namib Naukluft National Park, however, mining's effects last far longer than the projects itself.

Namibia's tourism industry is largely predicated on an idea of Namibia as being a pristine wilderness area. Tourists do not travel to Namibia for its gambling, nightlife, or beaches, as they might elsewhere. Rather, the vast majority of travelers come to Namibia in search of what they see as a disappearing commodity – nature unspoiled. Oxcart tracks and World War I campsites merely serve to illustrate how remote and relatively untouched this area is. Modern mining operations are an entirely different story.