# COUNCIL ON ETHICS

THE GOVERNMENT PENSION FUND GLOBAL

UNOFFICIAL ENGLISH TRANSLATION

# To the Ministry of Finance

Recommendation to exclude Zijin Mining Group Co Ltd. from the investment universe of the Norwegian Government Pension Fund Global

18 June 2012

## 1 Summary

The Council on Ethics for the Norwegian Government Pension Fund Global (GPFG) recommends the exclusion of the Chinese company Zijin Mining Group Co. Ltd.<sup>1</sup> (Zijin) from the GPFG because of an unacceptable risk of the company being responsible for severe environmental damage.

Zijin is a major producer of gold, copper and zinc and has a number of facilities for mineral extraction and metal production. Over the past years, there have been several serious incidents at the company's facilities where tailing dams from mining and processing have collapsed and resulted in extensive contamination and loss of human life.

The Council on Ethics has contacted the company several times with questions about the company's operations and the safety of such dams, but has not received any response.

The Council on Ethics finds that the risk of future incidents of this nature is great. This assessment is based on the scope and severity of previous accidents in combination with the company's unwillingness to provide information on risk-reducing measures.

# 2 Introduction

In the spring of 2011 the Council on Ethics decided to assess the Fund's investment in Zijin against the Guidelines for the Observation and Exclusion of Companies from the GPFG's Investment Universe (the Ethical Guidelines).<sup>2</sup> The background for this was the existence of information concerning large, serious accidents at the company's facilities resulting in extensive environmental damage.

At the end of 2011, the GPFG owned shares in the company valued at NOK 252 million, amounting to a 0.5 percent share of the company.

# 2.1 What the Council on Ethics has considered

The Council on Ethics has considered whether there is an unacceptable risk that Zijin is responsible for severe environmental damage as per paragraph 2, third subsection, letter c of the Ethical Guidelines.<sup>3</sup>

In this case the Council on Ethics has assessed the risk that major accidents may occur in the future at the company's production facilities. The background for this is that there have previously been several major accidents at the company's facilities which have resulted in extensive environmental damage. This involves tailing dams at waste disposal sites that have collapsed so that vast amounts of waste from mining operations, industrial waste and hazardous chemicals have been dispersed into river systems or flooded settlements and farmland. Over the past decade at least seven such incidents have been reported at the company's facilities in China.

<sup>&</sup>lt;sup>1</sup> Issuer ID: 8503408

<sup>&</sup>lt;sup>2</sup> Guidelines for the observation and exclusion of companies from the Government Pension Fund – Global's investment universe,

http://www.regjeringen.no/en/sub/styrer-rad-utvalg/ethics\_council/ethical-guidelines.html?id=425277

<sup>&</sup>lt;sup>3</sup> Ibid, section 2 (3): " The Ministry of Finance may, on the advice of the Council of Ethics, exclude companies from the investment universe of the Fund if there is an unacceptable risk that the company contributes to or is responsible for: [...]

c) severe environmental damage;"

# 2.2 Sources

Compared with previous cases where the Council on Ethics has recommended the exclusion of companies that have caused serious environmental damage, there is less information available in this case.

The Council on Ethics basis its assessment in this case in part on the limited information that is available from Chinese sources and the international press, as well as some information from the company's annual report and website.

The public information that is available as articles in the Chinese press often consists of rather general reports of these incidents. The degree of detail is generally low in the discussion of the company's lacking follow-up of government orders and the lack of reporting on environmental matters. Information available from the company on the matters that are the subject of this recommendation is limited and not very specific, and the company has not responded to the inquiries from the Council on Ethics. In accordance with the Ministry of Finance's White Paper to Parliament no. 20 (2008-2009), the Council on Ethics operates under the assumption that the absence of information concerning a company's conduct – and especially an unwillingness on the part of the company to provide information – may contribute to the risk of complicity in unethical conduct being regarded as unacceptably high.<sup>4</sup>

# **3** Background

## 3.1 The company's operations

Zijin Mining Group Co. Ltd. is the largest gold producer, the second largest copper producer and the fifth largest zinc producer in China. The company's revenue for 2010 totalled NOK 24.8 billion.

The company operates in 20 Chinese provinces and in nine countries outside China, while its activities are organised in a number of subsidiaries.<sup>5</sup> The Council on Ethics does not have a full overview of the company's activities, or where it has all of its production facilities. It is nevertheless clear that the company operates a large number of facilities for mineral extraction, preparation and metal refining.

The company was listed on the Hong Kong Stock Exchange in 2003 and the Shanghai Stock Exchange in 2008. The company's largest owners are Minxi Xing STE and the Newhanlu Industry Group, which have ownership interests of 39.9 and 14.9 percent, respectively. In addition to this, there are a number of owners with smaller ownership interests.

# 3.2 Processing waste from gold and copper production

Mining and the metal industry often generate vast amounts of waste that has to be managed. Waste that is not economically viable to recycle has to be disposed of. Where the production facility has been in operation for a long time, this may often involve large amounts of waste.

<sup>&</sup>lt;sup>4</sup> Report no. 20 (2008-2009) to the Storting, section 4.6,

see <u>http://www.regjeringen.no/pages/2172105/PDFS/STM200820090020000DDDPDFS.pdf</u> (in Norwegian) <sup>5</sup> The company's website: <u>http://www.zjky.cn/english/tabid/1012/Default.aspx</u>

Below is a brief presentation of the processing stages for the manufacture of gold and copper, which are Zijin's primary products, as well as the types of waste normally generated during production:

### Gold production

Gold is normally extracted from ore through hydrometallurgical<sup>6</sup> processes where a cyanide solution<sup>7</sup> is added to the crushed ore. The gold binds to the cyanide solution and is then extracted from this through further processing. Cyanide can, to some extent, be recovered from the ore reused; this is not always done. Either way, gold extraction generally generates large amounts of waste from mining operations in the form of processed ore that contains cyanide. One tonne of ore normally yields between 0.1 to 3 grammes of gold.<sup>8</sup> Ore that contains gold often also contains arsenic and heavy metals that can lead to serious long-term contamination after processing, for example, through runoff from tailing ponds.

## Copper production

Copper is extracted from sulphide or oxide ores containing copper. The extraction method depends on the type of ore. Copper is extracted from sulphide ore through smelting processes, and hydrometallurgical processes are used for oxide ores, where sulphuric acid is added to the ore for the extraction of copper and subsequent refining. Regardless of what methods are used, copper slag will be generated from the smelting process as well as processing waste mixed with sulphuric acid. The latter will normally be refined and used for industrial purposes, and the waste is either neutralised with limestone before it is disposed of, or disposed of without further treatment. The waste also generally contains arsenic and various heavy metals.<sup>9</sup>

# 3.3 Tailing dams

#### Design and maintenance

Waste from the mining and metal industry that cannot be recycled must be disposed of. It is normal procedure to establish tailing dams to keep the waste within a limited area and prevent the leaching of chemicals and heavy metals. Tailing dams also ensure that water can evaporate from liquid waste and particles can settle.

Tailing dams can be constructed in different ways, and their design will depend on what types and what amounts of waste are to be disposed of, as well as local factors such as topography, bedrock, amount of precipitation and seismic risk. These facilities may range from relatively simple designs, with a simple dam barrier made of earth or waste from mining operations, to more advanced and extensive dams with several chambers for treating waste in several steps or manage different types of waste.

This type of installation requires continuous monitoring and maintenance to ensure that they do not collapse. There are several factors which can weaken the structural stability of such

<sup>&</sup>lt;sup>6</sup> Hydrometallurgy: Metal extraction by leaching of ore with chemicals dissolved in water, followed by precipitation, by means, for example, of electrolysis in an aqueous solution.

<sup>&</sup>lt;sup>7</sup> The cyanide is added as sodium cyanide (NaCn) or potassium cyanide (KCN) dissolved in water.

<sup>&</sup>lt;sup>8</sup> International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide In the Production of Gold, <u>http://www.cyanidecode.org/</u>

 <sup>&</sup>lt;sup>9</sup> United States Environmental Protection Agency: *Profile of the Nonferrous Metals Industry* (2005), see <a href="http://www.epa.gov/compliance/resources/publications/assistance/sectors/notebooks/nfmetlsn.pdf">http://www.epa.gov/compliance/resources/publications/assistance/sectors/notebooks/nfmetlsn.pdf</a>

dams over time, for example, erosion and overflowing following large amounts of precipitation.<sup>10</sup>

#### Accidents – dam failures

The risks associated with tailing dams are well known. Dams of this kind have been used in the mining and processing industry for over 100 years, and there have been a great number of accidents where the dams have collapsed and resulted in more or less serious damage. In addition to the seven dam failures that have occurred at Zijin's installations, the Council on Ethics is aware of 15-20 tailing dam failures with serious consequences at industrial installations throughout the world in the past decade.

In recent times, the largest accidents as a result of disposal dam failures in Europe have been in Italy  $(1985)^{11}$ , Romania  $(2000)^{12}$  and Hungary (2010).<sup>13</sup> In the US, the last major accident of this type was in 2008.<sup>14</sup> In China (excluding Zijin) there were major accidents of this type in 2008<sup>15</sup> and 2011.<sup>16</sup>

http://english.mal.hu/engine.aspx?page=showcontent&content=Vorosiszap\_HIR\_EN

<sup>&</sup>lt;sup>10</sup> Spitz, Trudinger: "Mining and the Environment", CRC Press, 2009, chapter 18, Tailings Disposal and M. Rico et al: "Reported tailings dam failures – A review of European incidents in the worldwide context", Journal of Hazardous Materials, 152 (2008), p. 846-852.

<sup>&</sup>lt;sup>11</sup> Val de Stava, Italy, 1985: The tailings dams for waste from mining operations from a fluoride mine collapsed and resulted in a tidal wave where about 200,000 cubic metres of water and mud flooded villages so that 268 persons were killed, <u>http://www.stava1985.it/</u>

persons were killed, <u>http://www.stava1985.it/</u>
 <sup>12</sup> Baia Mare, Romania, 2000: After a tailings dam failed at a gold mine about 100,000 cubic metres of waste water containing cyanide flowed into the Some River. In addition to cyanide the discharge contained a number of heavy metals and resulted in severe contamination of several rivers and extensive fish death in rivers in Romania and Hungary. See *Report of the International Task Force for Assessing the Baia Mare Accident*: <a href="http://viso.jrc.ec.europa.eu/pecomines\_ext/docs/bmtf">http://viso.jrc.ec.europa.eu/pecomines\_ext/docs/bmtf</a> report.pdf

<sup>&</sup>lt;sup>13</sup> Kolontar, Hungary, 2010: About 700,000 cubic metres of red mud from alumina production flooded several villages as a result of a dam failure in a disposal dam. Ten persons were killed when eight square kilometres were flooded in mud. MAL's website:

<sup>&</sup>lt;sup>14</sup> Harrimann, Tennessee, USA, 2008: A disposal dam for ash waste from a coal-fired power station collapsed so that 4,000,000 cubic metres of ash waste and water covered an area of 1.6 square kilometres up to two metres thick. Significant damage to buildings and infrastructure, but no personal injuries, http://www.tva.gov/emergency/pdf/ash\_release.pdf

<sup>&</sup>lt;sup>15</sup> Xianfen, Shanxi, China, 2008: An illegally constructed disposal dam at a steel works collapsed and 265 persons were killed as a result when the tidal wave flooded a village. "*The unlicensed iron ore dregs retaining pond in Xiangfen City burst on Sept. 8, discharging a huge torrent of tailings, mud and rock that devastated a downstream village, an office building and a busy outdoor market.* 

The death toll from the accident has risen to 265 with several still listed as missing by 5 p.m. on Sunday. An initial investigation found the collapse was due to negligence. The tailings dumping pond was built in violation of regulations and had few safety inspections.", People's Daily Online, 22. Sept. 2008, http://english.people.com.cn/90001/90776/90882/6503998.html

# 4 Environmental damage as a result of the company's activities

## 4.1 Dam failures

The Council on Ethics is aware of the following reported incidents where Zijin's dam installations for industrial and mining waste have failed:

## Xinyi, 21 September 2010

A dam at the company's tin mine in Xiny Quinpai in Guangdong province burst in September 2010.

Official media reported that 22 people were killed and that there was significant damage to roads, drinking-water plants and farmland, as well as extensive death of fish. The subsequent investigation found that the company had violated a number of government orders and provisions for the construction and operation of such dams.<sup>17</sup>

In August 2011 six people from the plant's management were sentenced to imprisonment for violations that lead to the accident.<sup>18</sup>

## Ting River, 3 and 16 July 2010

Two separate accidents within an interval of a few days and the company's response received much attention in Chinese and international media. On 3 July 2010, a dam collapsed at one of the company's copper refineries in Fujian and 9000 cubic metres of industrial waste and chemicals flowed into the Ting River causing extensive environmental damage. An estimated 2000 tonnes of fish died as a result of the accident.

The company did not acknowledge that the accident had taken place until nine days later, and had not attempted to limit the discharge in the meantime.<sup>19</sup>

In an announcement dated 16 July 2010 the company reported on the accident that had occurred on 3 July. The company wrote that an illegally installed pipe had lead untreated

<sup>&</sup>lt;sup>16</sup> In July 2011 the official Chinese website *China.org.cn* stated that the drinking water supply for 200,000 people had been contaminated as a result of a dam break at a magnesium plant in Mianyang in Sichuan province. In this connection it is also stated that there are over 12,000 disposal dams in China, of which 17% are in poor or dangerous condition. "*The drinking water crisis in Mianyang, in Southwest China's Sichuan province, caused by the pollution of the Fujiang River by a manganese plant, should be seen as a warning about the lax management of more than 10,000 toxic mine tailings in the country, environmentalists said.[...]* 

On Thursday, a week after the river was contaminated by manganese ore residue flooding into it, the southwestern city was still struggling to provide bottled water to more than 200,000 people who rely on the Fujiang River for their drinking water. [...]

The 50-meter tailings dam, a wall built to hold the ore residue, was partly destroyed by a mudslide after heavy rain on July 21, said Liu Minggang, deputy head of Songpan county.[...]

Statistics from the Ministry of Environmental Protection show that toxic mining residue now poses increasing threats to the environment and public health.[...]

Since 2006, the Ministry has handled 43 emergency pollution cases caused by mine tailings, 10 of which disrupted supplies of drinking water.

There are 12,523 mine tailings in the country, of which 17 per cent are in poor or dangerous condition, according to the environmental watchdog.

<sup>&</sup>quot;About 95 per cent of them are small, with limited capacity to deal with emergencies," said a report published on the ministry's website. ", see http://m.china.org.cn/2011-07/29/content\_23099817.htm

<sup>&</sup>lt;sup>17</sup> People's Daily Online: <u>http://www.people.com.cn/h/2011/0712/c25408-3201948045.html</u>

<sup>&</sup>lt;sup>18</sup> See <u>http://www.china.org.cn/wap/2011-08/06/content\_23155322.htm</u>

<sup>&</sup>lt;sup>19</sup> "Embattled Chinese gold miner Zijin ignored orders to repair a breach in a tailings reservoir last year, according to a stock exchange filing on a toxic wastewater discharge that polluted a river earlier in July." see Reuters, 17 July 2010: <u>http://www.reuters.com/article/2010/07/17/china-pollution-zijin-idUSTOE66G00I20100717</u>

waste water to the river, and that government orders from 2009 to improve the drainage system had not been followed.<sup>20</sup>

On 16 July 2010 a similar, however, smaller accident occurred at the same installation, and an additional 500 cubic metres of waste were discharged when another dam at the same installation also failed.

These incidents were, for example, reported in the Communist Party's English-language paper *People's Daily*, together with allegations that the company had offered bribes to Chinese journalists to prevent media coverage.<sup>21</sup>

#### Dongping, 25 April 2009

On 25 April 2009 there was a dam failure at the company's gold mine installation in Dongping in the Hebei province. It has been reported that there was an older dam that had partially failed and lead to extensive contamination of farmland.<sup>22</sup> A similar accident allegedly also occurred in 2008 in Caikeng, but the circumstances surrounding this are unclear.

#### Shuiyindong, 27 December 2006

In 2006 a dam collapsed at Zijin Shuiyindong Gold Mine, and 200 000 cubic metres of waste was discharged as a result.<sup>23</sup> Nevertheless, the company claims that the extent of the damage was limited.<sup>24</sup> According to the pollution control authorities, the accident resulted in the drinking water for 100,000 people being contaminated with arsenic and cyanide.

<sup>&</sup>lt;sup>20</sup> "An illegal man-made pipe connected the no. 6 leakage observation well and the flood discharge channel, as a result of which waste water directly entered the Ting River. The investigation discovered that the no. 6 leakage observation well and the flood discharge channel had been connected in an illegal way, the volume of leaked solution exceeded the amount repumped and the excess leaked solution entered the Ting River directly through the flood discharge channel. The investigation carried out by the relevant environmental protection department in Fujian in September 2009 discovered that the volume of waste water entering the Ting River through the flood discharge channel was too high and the plant was required to carry out remedial measures immediately. However, up to the time of the incident, the plant had not carried out remedial measures to a satisfactory level." The company's press release of 16 July 2010: http://www.zjky.cn/Portals/1/LTN20100719005-E.pdf

<sup>&</sup>lt;sup>21</sup> The bribery accusation against Zijin Mining Group, China's largest gold mining group, stemming from its attempts to cover up a sewage spill was approved by the central government recently. In early July 2010, a leak in the sewage tank in the Purple Mountain Copper Mine, which is owned by the Zijin Mining Group, led to 9,100 cubic meters of sewage being spilled into the Ting River and resulted in the death of 3.78 million kilograms of fish in the river, causing serious environmental pollution in neighbouring regions. But the Zijin Mining Group attempted to hide this severe incident at first. Investigations from the GAPP showed that after the pollution incident was exposed, the Zijin Mining Group indeed tried to give envelopes with money to reporters and journalists to keep them quiet, but those reporters who were involved all rejected the bribes immediately, refunded the money or turned it over to their head offices for evidence. http://english.peopledaily.com.cn/90001/90776/90882/7120410.html

<sup>&</sup>lt;sup>22</sup> See report on <u>http://www.gzgov.gov.cn/gzgov/216457559920345088/20061228/217958.html</u>

<sup>&</sup>lt;sup>23</sup> Reported on the website of the pollution control authority of Jinan:

http://www.jnepb.gov.cn/moudle/mainsubend.aspx?id=DD63330F893528B9

<sup>&</sup>lt;sup>24</sup> The company's announcement on the accident: "In the afternoon of 27 December 2006, an accident occurred at Guizhou Shuiyindong Gold Mine, which is owned by Guizhou Zijin Mining Co., Ltd. ("Guizhou Zijin"), a subsidiary of Zijin Mining Group Co., Ltd. (the "Company"). A section of the dam in the tailings storage slid during the period for maintenance. As a result, about 200,000 cubic metres of tailings with waste water flowed out mainly into deserted Xiaochang reservoir and a small part of it flowed out into Baifen reservoir which is used for irrigation only. A mild injury has been reported. After the accident, Guizhou Zijin started the emergency plan and reported it to the local authorities. All local authorities were actively involved in the remedial actions of the accident. Mr. Zou Laichong, a director of the Company visited the scene immediately. With the assistance and co-operation of other parties, the source of pollution is under control and its impact is limited to 2.5 km from the tailings storage. It has not caused serious casualty and affected the living of the people in the area." available on http://www.infomine.com/index/pr/Pa459554.PDF

The cause of the accident was probably that the company had overloaded the disposal dams by adding too much waste to them, combined with a long period of unusually heavy rain.<sup>25</sup>

## Tongkang, August 2000

On 25 August 2000 a disposal dam collapsed at Zijin's wholly-owned subsidiary Jinshan Mining's gold mine at Tongkang in Fujian province. The surrounding farmland and local roads were flooded by industrial waste.<sup>26</sup>

# 4.2 Other matters

The company has been criticised by both the authorities and special interest organisations.

In connection with the stock exchange listing of the company in 2008, the company's activities were reviewed by the environmental authorities. In accordance with the so-called *Green Security Policy*, the environmental systems and practices of all listed companies must be approved.<sup>27</sup> In this connection the environmental authorities pointed out a number of faults and defects in the activities at 11 subsidiaries in the Zijin Group. To a great extent this concerned tailings dams that were not designed and maintained in accordance with regulations, in addition to previous orders to make improvements that had not been followed up. In a letter from the company to the special interest organisation *Institute of Public and Environmental Affairs*, dated 28 May 2010, the company explains that most of the faults and defects that were pointed out had been rectified or were in the process of being rectified.<sup>28</sup>

In addition, the special interest organisation *Green Law China*,<sup>29</sup> in an open letter of July 2010, pointed out the insufficient follow-up of the government requirements and insufficient reporting of environmental matters.<sup>30</sup>

<sup>&</sup>lt;sup>25</sup> <u>http://www.hydroinfo.gov.cn/gb/szyzlnb/2006/6.htm</u> (in Chinese)

<sup>&</sup>lt;sup>26</sup> See <u>http://www.cf1234567.com/20100803/311431978.html</u> (in Chinese)

<sup>&</sup>lt;sup>27</sup> General Office of the State Environmental Protection Administration:

http://www.mep.gov.cn/info/gw/huanban/200708/t20070816\_107999.htm (in Chinese)

<sup>&</sup>lt;sup>28</sup> Letter from Zijin to the Institute of Public and Environmental Affairs, dated 28 May 2010: http://www.ipe.org.cn/Upload/file/Notices/Feedback/007-Feedback-Zijin-Mining-Group-Co-Ltd-EN.pdf The letter closes as follows: "Our company would like to offer our sincere apologies for the failure to thoroughly complete all the improvement works, as was required by the EPB. Our company will: work towards increasing our knowledge of environmental protection work, establish a responsible attitude towards people and society, treat this environmental protection supervision order as an opportunity and carry out a total inspection of all internal environmental protection facilities, continue to strengthen investment in environmental protection, persist with the environmental protection projects and for the main projects carry them out in line with the "three simultaneous" procedures, maintain the environmental protection facilities and equipment so they are in a good condition, improve operational effectiveness and take advantage of internal recycling so as to discharge within the authorised standards. Our company promises to continue to strengthen and improve internal management and monitoring systems, ensure environmental protection investment, seek practical results and honour our commitment that we made when we floated on the stock market. At the same time we welcome the supervision by people from all parts of society."

<sup>&</sup>lt;sup>29</sup> Green Law China is a project in China that is run by the American organisation The Natural Resources Defence Council (NRDC), in which the aim is to promote the implementation of environmental legislation in China, <u>http://www.greenlawchina.org/about/</u>

<sup>&</sup>lt;sup>30</sup> Open letter dated 24 July 2010 from Green Law China to the Hong Kong and Shanghai Stock Exchange, where the company is listed: <u>http://www.greenlawchina.org/2010/07/zijin-mining-groups-inadequate-disclosure-of-china-acid-spill-what-needs-to-be-done-2/</u>: Since 2005 this enterprise has broken different environmental rules and regulations in Hebei, Xinjiang, and Guizhou, resulting in both accidents and violations. These incidents led to a number of toxic and hazardous substances being discharged into local water bodies. After an investigation, we found no evidence to suggest that the company has made any public

In addition, it has been reported that the company had been investigated in 2010 by the authorities for failure to comply with orders to make improvements and insufficient environmental reporting from the company's copper production in Longyan.<sup>31</sup>

## 5 Company's position

Since 2009 the Council on Ethics has approached the company three times to request information on the company's activities. The company has not responded to any of these requests. In April 2012, a draft of this recommendation was submitted to the company, and the company was encouraged to provide any remarks or comments. The company did not respond to this, either.<sup>32</sup>

The accidents in July and September of the same year are mentioned in the company's annual report for 2010. The company states that it has learned from these incidents and will put safety at the facilities first, and that work with accident prevention and management systems will be strengthened further.<sup>33</sup> The company's website also states emphasis on the environment and safety in connection with all the company's activities.<sup>34</sup>

disclosure of this information. In 2007 to 2008, the Environmental Protection Department instituted inspections of listed companies and pledged to rectify and reform environmental issues that surfaced from these inspections. On May 14, 2010 the Environmental Protection Department publicly announced and circulated a notice of criticism against this company in particular and its untimely response to environmental issues. Apart from Zijin Mining, there were also several sub-subsidiary companies that were subject to the Environmental Protection Department's criticism. Responding to the Environmental Protection Department's criticisms, Zijin Mining merely gave a brief reply concerning Zijinshan copper mine's rectification and reform developments, stating that 'rectification has already been completed'"

- <sup>31</sup> "Zijin Mining publicly criticised by the Ministry of National Environmental Protection for failing to rectify problems including information disclosure following pollution involving Zijin Copper wet plants", <u>http://eelib.zslib.com.cn/showArticle.asp?ID=11619&ArticlePage=6</u>
- <sup>32</sup> The letter of 4 August 2009 from NBIM on behalf of the Council on Ethics with questions on the company's activities in Myanmar. The letter of 21 November 2011 from the Council on Ethics to the company with questions on what measures the company has implemented in order to prevent any future dam breaks at its facilities. Follow-up letter of 22 December 2011 with a request for a reply to the letter dated 21 November 2011. The letter from the Council on Ethics to the company 25 April 2012 with a draft of this recommendation and invitation to submit any comments or remarks. The Council has not received a reply to any of these letters.
  <sup>33</sup> Zijin Mining Group Company Ltd: Annual Report 2010: "Business Strategies:
- (i) To comprehensively enhance the precautionary standard and the management standard in the environmental protection and safety system, to re-build Zijin's brand name in environmental safety, thoroughly implement the concept of scientific development, adhere to the philosophy of "putting safety first, prioritize environmental protection ", seriously learnt the lessons from the "7.3" Incident and the "9.21" Incident, and properly manage the relationship among speed, efficiency and law-abiding and disciplined operation.[...]", http://www.zjky.cn/Portals/1/Annual2010%20Summary%20Review.pdf

<sup>34</sup> Zijin Mining Group Company Ltd, website Sustainability – Safe operation: "During its production and construction, Zijin Mining Group seriously implements laws and regulations, such as Safe Production Law, Environmental Protection Law, Two Decisions, etc., as well as the important instructions of central government leaders on safe production, environmental protection and social security. It adheres to the guideline of "prevention & safety first", implements the principle of "He who is in charge is responsible", improves its administration, strengthens its management, puts into effect the responsibility system level by level, checks and rectifies against hidden perils promptly, builds a sound interior precaution mechanism, makes efforts to carry out infrastructure construction, and guarantee key & critical positions. In this way, the whole company has maintained a favourable situation of "basically stable security, comparatively safe production, sound environmental protection measures and sustainable growth of economy", http://www.zjky.cn/english/tabid/956/Default.aspx

## 6 Assessment by the Council on Ethics

A review by the Council on Ethics shows that there have been 25 cases worldwide of accidents in the past ten years where dams for the mining and processing industries have collapsed and resulted in extensive damage and environmental pollution.

With regard to the company Zijin, the Council on Ethics has information on seven serious incidents over the past ten years where such dams have collapsed and resulted in extensive damage. Seen in relation to the total number of accidents worldwide during the same time period, it appears as if Zijin has been particularly exposed to such accidents.

It must be regarded as general knowledge that the operation of tailings dams in mining and the metal industries entails a risk of serious environmental damage, both acute and longacting. In the worst case scenarios, dam failures must be characterised as environmental catastrophes with regard to the extent of damage. In several of such accidents, people have drowned when populated areas have suddenly been flooded. In addition, drinking water sources have been contaminated, and there has been extensive impact on aquatic life and contamination of farmland.

The safe operation of tailings dams requires that they have been designed from the start to withstand both normal operating conditions and unusual circumstances, such as large amounts of precipitation and earthquakes, and that they are regularly maintained to compensate for the constant deterioration they are exposed to. The common factor for the accidents that have been discussed in this recommendation seems primarily to be installations that have been poorly (and in some cases illegally) designed, overloaded and insufficiently maintained, resulting in failure during periods of heavy precipitation. Accidents like this must be expected if they are not prevented.

The detailed consequences of the aforementioned events are not known. In general, it is also likely that disposal facilities that have not been adequately designed or are poorly maintained will have significant and continuous run-off of environmentally hazardous substances. In addition to the risk of acute, catastrophic events, it is, in other words, likely that these installations will entail significant contamination, even during day-to-day operations. In the cases where discharges into river systems stem from gold production installations, this is primarily in the form of arsenic, cyanide and heavy metal contamination.

In this case the Council on Ethics compares Zijin's conduct with the environmental criteria in GPFG's ethical guidelines, with particular emphasis on the risk of *future* environmental damage:

"In assessing whether the company shall be excluded in accordance with subsection (3), the Ministry may, for example, attach importance to the probability of future norm violations; the severity and scope of such violations; the connection between the norm violations and the company in which the Fund has invested; whether the company is doing what can reasonably be expected to reduce the risk of future norm violations within a reasonable time frame; the company's guidelines for, and work on, safeguarding good corporate governance, the environment and social affairs; and whether the company is making a positive contribution to those affected, presently, or in the past, by the company's conduct."<sup>35</sup>

Previous incidents and omissions can give an indication here of future patterns of behaviour, and the Council on Ethics finds that several serious accidents have occurred at the company's

<sup>&</sup>lt;sup>35</sup> Guidelines for the observation and exclusion of companies from the Government Pension Fund – Global's investment universe, section 2 (4),see <u>http://www.regjeringen.no/en/sub/styrer-rad-</u> <u>utvalg/ethics\_council/ethical-guidelines.html?id=425277</u>

installations over the past decade. Even though these accidents generally occur after periods of heavy precipitation, dam failures cannot be considered natural disasters. It is likely that all the accidents can be explained by a combination of factors, where the installations have not been designed in accordance with the regulations, insufficient inspections and maintenance, overloading of installations, as well as inadequate compliance with government orders. These are all factors that lie within the company's control and area of responsibility.

The company's reporting on these events is very limited, and in China the company is criticised for lack of transparency and insufficient reporting. After the accident in 2006 the company made an announcement that the scope of the damage had been very limited, even though in reality it had been a disaster where, for example, the drinking water for 100 000 persons had been seriously contaminated. Information that the company had offered bribes to journalists in connection with the accidents in 2010 in order to avoid press coverage, reinforces the impression of lack of transparency.

In the company's 2010 annual report, the company states that it has learned from these events and that any future recurrence will be prevented. The Council on Ethics has on several occasions contacted the company with a view to obtaining more information on its activities and risk-reducing measures to prevent future environmental damage, but it has not received any response. The Council on Ethics finds that the unwillingness by the company to disclose information, in itself, contributes to increasing the risk that the GPF's investment in the company is in violation of the fund's ethical guidelines. In this connection the Council on Ethics makes reference to the White Paper to Parliament no. 20 (2008-2009), where the Ministry of Finance states:

"The availability of information in emerging markets is often limited. Through its recommendations the Council on Ethics has developed a high standard of documentary requirements and evidence of violations of human rights or environmental damage. It can be difficult to meet the same requirements in a number of emerging markets. The result can be that a company in a developed market in a western country and a company in an emerging market that, based on the scope and degree of ethical guideline violations, should be treated equally, can be treated differently because there are different degrees of opportunities to document the violations of norms. This can lead to the exclusion of the "worst" companies in developed markets while "even worse" companies in emerging markets remain in the investment universe. The Ministry finds that a lack of information about a company's conduct, and not least the willingness of the company to disclose information may itself contribute to the risk of complicity in unethical conduct being regarded as unacceptably high. In practice this could mean that the same documentary requirements for justifying exclusion cannot be made in less transparent markets, where facts can be more difficult to prove."<sup>36</sup>

The Council believes that the above provision should be applied to cases like this, where a company responsible for severe incidents gives provides limited information on how it will avoid similar, future incidents. Based on an overall assessment, the Council on Ethics finds that there is an unacceptable risk for future, serious environmental damage as a result of Zijin's activities, and recommends the exclusion of the company from the GPFG.

<sup>&</sup>lt;sup>36</sup> The English translation of the White Paper provided in this document is unofficial. See note 4

## 7 Recommendation

The Council on Ethics recommends that Zijin Mining Group Co Ltd. be excluded from the Norwegian Government Pension Fund – Global because of an unacceptable risk that the company is responsible for severe environmental damage.

Ola Mestad Chair	Dag Olav Hessen	Ylva Lindberg	Gro Nystuen	Bente Rathe
(sign.)	(sign.)	(sign.)	(sign.)	(sign.)

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