Mr. Yang Soo-Young CEO Korea National Oil Corporation 305, JONGGA-RO, JUNG-GU, ULSAN, Republic of Korea

October 8, 2019

Dear Mr. Yang Soo-Young,

We are writing to express our deep concern for the Korea National Oil Corporation (KNOC) associated oil production and the threat to one of the largest and most unique underground freshwater desposit Kokzhide in Kazakhstan. This letter addresses impacts, and pollution caused by the oil exploration and production of Ada Oil Firm LLP, which is a subsidiary of the KNOC.

The groundwater deposit of the Kokzhide sand massif, located between the Emba and Temir rivers in the Aktobe region of the Republic of Kazakhstan, is the largest source of groundwater in Western Kazakhstan, and is considered unique in the quality of drinking water, with the total salinity not exceeding 0.1-0.2 g\dm3ⁱ. The underground water deposit was discovered in 1983 during oil exploration in the Kokzhide sand massif, the underground water deposit was therefore named after Kokzhide. The reserves of the underground water field, calculated for a 25-year life, were calculated on the daily production rate of over 196,000 cubic metersⁱⁱ. The Kokzhide currently provides water only to nearby villages, although the output means this field can in fact provide sufficient fresh water not only to the Aktobe region, but also to the Atyrau and Mangystau regions, which are experiencing an acute shortage of drinking water. There were plans to lay a conduit from Kokzhide to Kulsary in the Mangistau region for connection to the existing Volga-Aktau conduitⁱⁱⁱ. In 1990, the executive committee of the Aktobe regional Council of People's Deputies decided to ban all types of oil prospecting and oil production within Kokzhide^{iv}. By the Decree of the Government of the Republic of Kazakhstan No. 1212 dated November 18, 2010, Kokzhide sands were assigned to the category of specially protected natural territories of republican significance that have special environmental value. Akimat of Aktobe region by decree No. 7 of 01/23/2013 created the state natural reserve of local importance "Kokzhide-Kumzhargan", with a total area of 43977 hectares^v.

However, the Kokzhide massif is currently affected due to the exploration and production of oil. Seven oil producing companies operating within the Kokzhide massif are: Kazakhoil Aktobe LLP, KMK Munai JSC (52 producing wells), Ada Oil Firm LLP (42 producing wells), CNPC-Aktobemunaigas JSC (10 producing wells), LLP "Urikhtau Operating", LLP JV "Fial" and LLP "MGK". Ada Oil Firm LLP is a subsidiary of KNOC (40% of the shares, LG International 35% of the shares) and is developing the Bashenkol oil field within Kokzhide^{vi}. **Thus, KNOC subsidiary account for almost 40% of production wells within the Kokzhide underground water field.**

The main factor in the underground water pollution of Kokzhide is the activity of oil companies, which are mainly located in the northwestern and western parts of the Kokzhide massif. Soil pollution begins with the drilling process and the operation of oil production equipment. When drilling, the natural tightness and filtration properties of the aquifer are disturbed. When associated gas is flared, the pollution in the form of precipitation then enters the soil^{vii}. The 2012 studies conducted by the Republic of Kazakhstan's Agency of Applied Ecology showed presence of petroleum products in freshwater reserves. The Agency was tasked with water monitoring duties by order of the Department of Natural Resources and Environmental Management of the Aktobe region^{viii}. Official data of 2010-2014 recorded that substances from oil production exceeding 3 to 42 times above the limit values were detected at three observation wells in Kokzhid^{ix}.

From May to December 2015, at the request of the Department of Natural Resources and Environmental Management of the Aktobe region, specialists from the company "Aliya and K" monitored the water in Kokzhide and found significant pollutants in the groundwater. Specifically, the level of cadmium exceeded the limit value by 20 times, iron by 1000 times, oil products by 15 times and lead in the area of 7 times above limit value. The results of state monitoring for the period 2010-2017 confirm levels of water contamination as an outcome of earlier oil exploration activities still affects the quality of groundwater in Kokzhide in 2017^{xi}.

The prosecutor's office of the Aktobe region also repeatedly found violations in Kokzhide during its inspections^{xii}. Back in 2012, public authorities found roads, power lines and flow lines to 15 wells of Ada Oil were built without the permission of the Committee of Geology and Subsoil Use of the Ministry of Industry and New Technologies^{xiii}. According to the Department of Ecology of Aktobe Oblast, currently the largest impact on Kokzhide is exerted by the companies CNPC-Aktobemunaigas JSC, KMK Munai JSC, Kazakhoil Aktobe LLP and Ada Oil Firm LLP, as they produce uninterrupted oil production^{xiv}. According to local hydrogeologists, the most dangerous companies for Kokzhide are those who use shallow wells, including the Ada Oil. If the water lies at a depth of 300 meters, then the company drills vertical wells with a depth of 500-600 meters, which leads to pollution of aquifers^{xv}. The Department of Ecology of the Aktobe region conducted another study of water in Kokzhide in July this year, and the analyses of samples taken from observation wells indicate excess of norms (MPC) in the range of 1.35 to 7.81 MPC maximum concentration limits for oil products at five wells of Ada Oil^{xvi}.

We would also like to draw your attention to increasing public concern on the pollution and exploitation of the Kokzhide watershed as a result of oil exploration and production. In April 2018, deputies of Kazakhstan's Parliament (lower house) sent an appeal co-signed by other parliamentarians xvii to the Prime Minister Sagintayev on behalf of concerned citizens, specialists and the representatives of state bodies of Aktobe who appealed for the protection of the watershed and about the state of Kokzhide. The deputies noted in the same communication about the alarming plans for the proposed drilling of another 168 wells Kokzhide.

In response, Prime Minister Bakytzhan Sagintayev said in May 2018 that the Kokzhide underground water field belongs to specially protected natural areas where any activity that threatens their safety is prohibited. According to him, now state monitoring of groundwater covers the southeastern part of the Kokzhide sand massif. The ministries for investment and development, energy, the Akimat of Aktobe oblasts were instructed to study existing contracts for the development of oil in Kokzhide, with the view of preventing environmental degradation and groundwater pollution, as well as the cessation of oil production at the Kokzhide massif^{xx}. Further actions have been taken as recent as May 29 this year, when a group of ecologists and public figures of the Aktobe region sent an appeal to the head of the region O. Urazalin. In the letter, they openly indicate that the Kokzhide freshwater field may soon die, as subsoil users increase the volume of prospecting and exploration^{xxi}.

The pollution of the Kokzhide underground water has already impacts on the residents around Ada Oil Firm. For example, the water supply to the village of Bashenkol located in the Ada Oil Contract Area was cut in 2008 and the residents of Bashenkol have been drawing the water from their private wells. The residents find the oily film appearing on the water surface after it sits for a day but they still use the water since there is no alternative ways to get the water.

Despite of the ongoing pollution of the Kokzhide underground water field and the local residents' suffering, it has been impossible for the local residents to raise issue to Ada Oil Firm due to lack of official communication channel. Since Ada Oil Firm does not have any complaint mechanism accessible for the local residents, they bring their complaints to the local authorities. Furthermore, since there is no website accessible for Ada Oil Firm besides introduction in KNOC's website in English, the local residents have

not been able to get any information regarding the business activities and their impacts to them as well as to the environment.

As a public agency in Korea, KNOC adopted the Human Rights Management Regulations, and is committed to the implementation of the regulations. Parts of the regulations relevant to the concerns central to this letter are:

- Article 8. (2) KNOC is mindful of preventing human rights violations in any places of operation including the operation of its business partners.
- Article 11. KNOC endeavors to prevent the human rights violations of the local residents at the place of operation.
- Article 12. KNOC strives to comply with the domestic as well as foreign environmental regulations, to protect the environment and to prevent the pollution.
- Article 34. KNOC should redress the human rights violations occurred or violation of the Human Rights Management Regulation; KNOC should take necessary measures such as changes in position or education for prevention against the employee who violate the human rights intentionally or negligently.

We therefore request that the KNOC holds the Human Rights Management Committee and conduct the following reviews based on the said regulations:

- Review whether Ada Oil Firm LLP is in violation of the article 12 of the Human Rights Management Regulations of KNOC according to the findings of the prosecutor's office of the Aktobe region.
- Review whether Ada Oil Firm LLP's operation amounts to the violation of the rights to water of the residents, thus in violation of article 11 of the Human Rights Management Regulations of KNOC.
- Take appropriate measures if the Committee finds KNOC's violation of the Human Rights Management Regulations.

In connection with the foregoing, we would also ask the KNOC to:

- 1. Conduct an independent investigation by involving third parties and authorized state bodies on the pollution and impacts to the environment and on the Kokzhide underground water field,
- 2. Conduct public consultations for concerned citizens and professionals who have appealed on the state of Kokzhide watershed;
- 3. Make consultation results public and accessible to the Kazakh public and local communities;
- 4. Prohibit further expansion of the activity of Ada Oil Firm LLP, as well as the drilling of any new wells within the Kokzhide massif;
- 5. Conduct self-monitoring of all KNOC associated activities, and in the event of violations, company should suspend the activities until further investigation;
- 6. Make the self-monitoring outcome available to the Kazakh public within 30 days;
- 7. When monitoring results show that the environmental and hygienic standards in soil and water are exceeded, suspend any work until the pollution is eliminated;
- 8. Make public the company's environmental management plan including a management action plan which outlines tangible measures against violation.

We look forward to your timely response to our concerns and demands by return email, and please do not hesitate to contact Sergey Solyanik, consultant to Crude Accountability (sergey@crudeaccountability.org) should you have any questions.

Thank you and best regards,

Sergey Solyanik, consultant to Crude Accountability, Almaty, Kazakhstan

Vadim Ni, Chairman of the Ecoforum of NGOs of Kazakhstan, Almaty, Kazakhstan

Lukpan Akhmedyarov, Editor-in-chief of the newspaper Uralsk Week, Uralsk, Kazakhstan

Shin Young Chung, Attorney-at-law, KTNC Watch, Seoul, Republic of Korea

http://orenpriroda.ru/steppene/sim2009/1658-%D0%BF%D0%B5%D1%81%D0%BA%D0%B8-%C2%AB%D0%BA%D0%BA%D0%BE%D0%BA%D0%B6%D0%B8%D0%B4%D0%B5%C2%BB-%D0%BA%D0%B0%D0%BA-%D0%BF%D0%B0%D0%BA-%D0%BF%D0%BA-%D0%BB%D0%BB-%D1%81%D0%BA%D0%BA%D0%BB%D0%BB-%D1%81%D0%BA%D0%BB-%D1%81%D0%BA%D0%BE%D0%B9-%D1%81%D1%82%D0%B5%D0%BF%D0%B8

https://www.inform.kz/ru/ekologi-aktobe-my-mozhem-poteryat-mestorozhdenie-podzemnyh-vod-kokzhide a3531828

¹ Environmental quality targets for the Aktobe region for 2018-2025, Ecoservice-S LLP, Almaty-Aktobe 2017, pp. 116-130 (Целевые показатели качества окружающей среды для Актюбинской области на 2018-2025 гг., ТОО «Экосервис-С», Алматы-Актобе 2017, стр.116-130.)

ii https://kursiv.kz/news/finansy/2019-04/bolee-11-milliarda-tenge-vydelyat-na-ocenku-zapasov-mestorozhdeniya-presnykh

iii http://aktobetimes.kz/verhnyaya-novost/2333-rodniki-kokzhide-otravlyayut-neftyu-i-metallami.html

^v Environmental quality targets for the Aktobe region for 2018-2025, Ecoservice-S LLP, Almaty-Aktobe 2017, pp. 116-130. (Целевые показатели качества окружающей среды для Актюбинской области на 2018-2025 гг., ТОО «Экосервис-С», Алматы-Актобе 2017, стр.116-130.)

vi http://www.knoc.co.kr/ENG/sub03/sub03_1_1_2.jsp; http://www.knoc.co.kr/ENG/sub05/sub05_4.jsp

vii Environmental quality targets for the Aktobe region for 2018-2025, Ecoservice-S LLP, Almaty-Aktobe 2017, pp. 116-130. (Целевые показатели качества окружающей среды для Актюбинской области на 2018-2025 гг., ТОО «Экосервис-С», Алматы-Актобе 2017, стр.116-130.)

viii https://www.zakon.kz/4535687-prokurory-aktjubinskojj-oblasti-ratujut.html

 $[\]frac{ix}{http://agroinfo.kz/neft-otravila-ogromnoe-mestorozhdenie-pitevoj-vody-v-aktyubinskoj-oblasti/\ ;}$

x http://aktobetimes.kz/verhnyaya-novost/2333-rodniki-kokzhide-otravlyayut-neftyu-i-metallami.html

xi Environmental quality targets for the Aktobe region for 2018-2025, Ecoservice-S LLP, Almaty-Aktobe 2017, pp. 116-130. (Целевые показатели качества окружающей среды для Актюбинской области на 2018-2025 гг., ТОО «Экосервис-С», Алматы-Актобе 2017, стр.116-130.)

xii http://aktobetimes.kz/verhnyaya-novost/2333-rodniki-kokzhide-otravlyayut-neftyu-i-metallami.html

xiii https://www.zakon.kz/4535687-prokurory-aktjubinskojj-oblasti-ratujut.html

xiv Letter of the Department of Ecology of the Aktobe region No. 01-05-10 / 1996-ZT-C-22 dated 07.29.2019.Письмо департамента экологии Актюбинской области №01-05-10/1996-ЖТ-С-22 от 29.07.2019.

xv https://inbusiness.kz/ru/news/najti-investorov-dlya-vodnogo-mestorozhdeniya-kokzhide

xvi https://fergana.agency/news/109590

xvii This appeal was signed by the deputies of the Mazhilis of the Parliament of the Republic of Kazakhstan: G.A. Baymakhanova; G.A. Schegelsky; J.A. Akhmetbekov; S.T. Seidumanov; M.M. Magerramov; Sh.A. Utemisov; I.V.Smirnova; A.O. Konurov; V. B. Kosarev; T.I. Syzdykov (https://rezonans.kz/narodnyj-deputat/4935-sokhranit-v-chistote-podzemnye-vody).

xviii https://rezonans.kz/narodnyj-deputat/4935-sokhranit-v-chistote-podzemnye-vody

xix https://informburo.kz/novosti/sagintaev-otvetil-deputatam-na-zapros-o-zagryaznenii-podzemnyh-vod-na-yugo-zapaderk.html

xx https://informburo.kz/novosti/sagintaev-otvetil-deputatam-na-zapros-o-zagryaznenii-podzemnyh-vod-na-yugo-zapaderk.html

xxi http://agroinfo.kz/neft-otravila-ogromnoe-mestorozhdenie-pitevoj-vody-v-aktyubinskoj-oblasti/; https://www.inform.kz/ru/ekologi-aktobe-my-mozhem-poteryat-mestorozhdenie-podzemnyh-vod-kokzhide_a3531828