

【Questions and Answers】

- I.** Please provide, in detail, additional information and any comment you may have on the above-mentioned allegations and concerns expressed.
1. Having expressed deep regrets over the damages caused by humidifier disinfectant at their early stage, the Government of the Republic of Korea (hereinafter referred to as “the Government”) has carried out studies to identify the cause of the damages, along with providing the above-mentioned support. In August 2017, President Moon Jae-in of the Republic of Korea offered an apology on behalf of the Government to the victims affected by humidifier disinfectant, saying “It was an incident that the fault lays with the relevant companies, but the Government failed to prevent it and also failed to cope with it actively after the damages began to surface.” He instructed his administration to allocate the national budget with a view to secure more financial resources for the remedy of victims, the investigations to identify cause of the damage, and the support for victims, while requesting to develop preventive measures so that such incidents never happen again.
 2. The Government is accelerating efforts to support the victims. With the national budget, the Government has been providing medical expenses, nursing expenses and living expenses for 798 victims with severe lung injury, fetal damage or asthma since such health damages are admitted as caused by humidifier disinfectant. The Government has been also providing medical expenses for 2,010 alleged victims who suffer from interstitial lung disease, pneumonia or bronchiectasis as these diseases may be caused by exposure to humidifier disinfectant, with the fund raised by the relevant companies in accordance with the Special Act on Remedy for Damage Caused by Humidifier Disinfectants. In addition, it offers psychological therapy service upon request by victim, and carries out health monitoring on all of victims. Currently, the Government is considering to take further measures to address secondary damage of victims, including depression and stress disorder.
 3. The Government keeps the basic stance that it provides relevant information for the litigations filed by the victims against the relevant companies. As a part of the support, the Government carries out animal testing, clinical research and epidemiological survey to identify toxicity and health effect of PHMG, PGH, CMIT and MIT.
 4. For preventive measures of the Government, please see the answer to Question **IV**.

- II.** Please provide an update on the status of any investigations, whether concluded or ongoing, related to this case by Your Excellency's Government. In particular, please provide information regarding criminal investigations for chemical manufacturers, importers and/or distributors implicated by the sale of chemical products in the case of toxic humidifier sterilizers.
- A.** Updates on the Status of Criminal Investigations by the Prosecutor's Office on Chemical Manufacturers and Distributors of Toxic Humidifier Sterilizers
5. The ROK Prosecution has so far charged a total of 21 persons with negligent homicide. These include representatives of manufacturers and retailers of toxic humidifier sterilizers Oxy, Cefu, Lotte Mart and Homeplus, and a professor who allegedly manipulated the results of assessments on the safety of the humidifier sterilizers. As of today, 18 of those charged were found guilty, 2 not guilty, and the case for one person is currently pending at the Supreme Court. Most of the key persons involved in the case were sentenced to imprisonment, including six years in prison for the former Oxy CEO and head of Oxy's research and development department, five years in prison for the former Cefu CEO, three years of imprisonment for the Lotte Mart sales director, and four years in prison for the Homeplus executive. The Prosecutor's Office is currently investigating Aekyung Industrial and other business entities involved in the production and distribution of the toxic humidifier sterilizers containing CMIT/MIT.
- B.** Establishment of "A Special Investigation Commission on humidifier disinfectants and April 16 Sewol Ferry Disaster"
6. The Special Act on Investigating Tragic Incidents and Building a Safe Society (hereinafter referred to as 'the Special Act') went into effect on December 12, 2017. The purpose of the Special Act is to build a safe society by fact-finding on the toxic humidifier sterilizer incident and the Sewol Ferry Disaster including the cause, the settlement and follow-up measures, determining accountability for the incidents, providing support for victims, and creating preventative measures and response plans to cope with disasters. A Special Investigation Commission on humidifier disinfectants and April 16 Sewol Ferry Disaster (hereinafter referred to as 'the Commission') was established in accordance with the Special Act. The Commission, an organization independent from the administration, has its status and independence

in performing its duty explicitly guaranteed under the Special Act. On December 12, 2018, the Commission decided to initiate an investigation on the toxic humidifier sterilizer incident and the Sewol ferry disaster, and announced 49 tasks. In the course of the next one year, the Commission will carry out an investigation that not only includes a fact-finding mission on these incidents, but also a review of the adequacy of remedies.

III. Please provide information on the implementation of the Special Act on Remedy for Damage Caused by Humidifier Disinfectants of 2017, including measures taken by the Governments since 2015 to identify further victims and the total number of alleged and identified victims, as well as information on remedies provided, including compensation and measures to provide necessary access to medical services to those affected by the use of the humidifier sterilizer products. Please provide specific details as to why so few victims are able to access an effective remedy to date, and how the above mentioned Special Act may help to address the challenges faced by the hundreds of thousands of people who were harmed by their exposure to the toxic consumer product.

A. Major contents of the Special Act

7. Korea enacted and enforced the Special Act on Remedy for Damage Caused by Humidifier Disinfectants in February 2017 and August 2017, respectively, which aims to provide victims with swift remedy and sustainable support.
8. By taking the Special Act as a legal ground, the Government defines victims of toxic humidifier disinfectants, and develops standards and methods of its support. Furthermore, the Special Act obliges the relevant companies to raise fund for victims.
9. The Ministry of Environment (hereinafter referred to as “MOE”) established the Center for Supporting Victims of Humidifier Disinfectants where finds victims, collects and manages the information on them, and provides them with financial support such as medical expenses. In addition, the MOE made the Health Center for Victims of Humidifier Disinfectants where monitoring any change in health condition of the victims. With these two Centers, the MOE prepares and responds to potential health damage of the victims.

B. Measures by the Government to identify victims

10. Since 2011 when the Government started to receive applications, a total of 6,277 people submitted their applications to be admitted as a victim of toxic humidifier disinfectant. The Government investigates the submitted applications by disease and decides whether each of them is a victim or not.

11. The Government has conducted a study on specific lung disease, fetal damage and asthma, and currently added interstitial lung disease, pneumonia and bronchiectasis into the study as they may be potential disease caused by humidifier disinfectant. It has a plan to keep updating the study by adding more diseases.
12. When a new disease is confirmed as a disease caused by humidifier disinfectant, the Government will perform an investigation on existing and new applicants based on medical records submitted by an applicant and the information from the National Health Insurance Service. Once the causal relation is confirmed between the disease and individual applicant's exposure to humidifier disinfectant, the Government will admit him or her as a victim and provide the remedy.

C. Total number of alleged and identified victims, and remedies

13. The Government completed its investigations on 5,572 out of 6,277 applications by March 2019. Of those, the Government provides medical expenses, living expenses, nursing expenses, funeral expenses and others for 798 victims suffering from severe lung disease, fetal damage and asthma with the national budget, and for 2,010 alleged victims suffering from interstitial lung disease, pneumonia and bronchiectasis with the fund raised by relevant companies.
14. In addition, the Health Center for Victims of Humidifier Disinfectants performs a monitoring program on physical and mental health of the victims, and provides them with medical treatment when secondary damage occurs.

D. Reason why so few victims are identified

15. In the past, the Government admitted victims only when they have severe lung disease as the causal relation was fully proved by scientific evidence. At that time, all of the victims fell under the categories of "Definite" and "Probable", which indicates higher levels in the four categories of damage.
16. At present, the Government admits more diseases like fetal damage and asthma as those caused by humidifier disinfectant based on the results of toxicity study, clinical examination and epidemiological study. In addition, the Government uses the fund raised by the relevant companies to support those with interstitial lung disease, pneumonia and bronchiectasis.
17. The Government is reviewing a variety of possible diseases caused by humidifier disinfectants based on available big data such as health insurance data of those exposed to humidifier disinfectants. Once it confirms that a disease is caused by humidifier disinfectant based on scientific evidence, it will provide the remedy to those with such disease.

E. How the Special Act helps remedy for those potentially harmed by the exposure to toxic humidifier disinfectants

18. The Government has conducted a campaign to identify victims through newspapers, broadcasts, local governments and hospitals so that anyone suspecting their disease may be caused by the exposure to humidifier disinfectants can apply for the investigations. As of now, the government continues to receive applications from alleged victims.
19. When an applicant is confirmed as a victim based on the results of the investigation, the Government offers the remedy in accordance with the Special Act. If an applicant is not confirmed as a victim but proves his/her exposure to humidifier disinfectants, the applicant must be subject to health monitoring.

IV. Please provide further information on preventative and precautionary measures taken to avoid recurrence, and to ensure that SK Chemical, Aekyung Industrial, Emart and any other chemical manufactures, importers and/or distributors are fully accountable for their contribution to this this tragedy.

A. Please provide further information on preventive and precautionary measures taken to avoid recurrence.

20. To protect public health and the environment from risks of chemical substances, Korea enacted and enforced the Act on Registration, Evaluation, etc. of Chemical Substances (ARECS) in May 2013 and January 2015, respectively. By taking ARECS as a legal ground, the Government conducts hazard review and risk assessment of chemical substances before commercialization of the products. For chemical substances of risk concerns, it manages their safety with prevention-focused policies and measures. As the ARECS amendment came into effect in January 2019, all chemical substances manufactured or imported one ton or more per year should be registered by 2030 in a stepwise manner.
21. In addition, Korea came into effect the Act on Consumer Chemical Products and Biocides Safety in January 2019. Pursuant to the pre-approval system of the Act, all biocidal substances and products should be placed on the market only after the Government approves their safety.
22. The MOE purchases consumer chemical products on the market, and then analyzes them to check their compliance with safety and labeling standards. For consumers, the information on hazardous substance contained in a product and the risks thereof should be labelled on the product. Under the Chemicals Control Act, the MOE introduced a universal chemical tracking system where a checking number is issued to chemical substance to manage the entire life cycle of chemical substance, including manufacture, import, storage and sales. Within the supply chain, purchaser

should be provided the name, concentration, classification and labelling information of hazardous substance.

B. Please provide further information on preventive and precautionary measures taken to ensure that SK Chemical, Aekyung Industrial, Emart and any other chemical manufacturers, importers and/or distributors are fully accountable for their contribution to this tragedy.

23. Since the persons who had used CMIT/MIT-contained products showed specific diseases same with the victims who had used PHMG-contained product, the Government admitted them as a victim of toxic humidifier disinfectants and has been carrying out a study on risks and health impacts of CMIT/MIT, including toxicity test, clinical examination and epidemiological study. In January 2019, the Korean Prosecution Service resumed an investigation on manufacturers and distributors of CMIT/MIT-contained products, including SK Chemical and Aekyung Industrial.

V. I would also respectfully request an update on the implementation of other recommendations put forward in the report of my mission to the Republic of Korea related to humidifier sterilizers and other toxic consumer products.

Recommendation of the Special Rapporteur

The Korean government is recommended to expand support for the victims, to monitor and enforce a legislation requiring businesses to conduct human rights, and to protect the people's right to information accessibility regarding hazardous substances.

24. To extend the scope of relevant diseases, the Government is carrying out a study on possible diseases such as allergic rhinitis, conjunctivitis, tympanitis, atopic dermatitis, etc. It is also performing a clinical and epidemiological study to consider underlying disease of individual victim.

25. The MOE amended the Special Act to simplify procedures of submitting and reviewing an application so that the victims can access the remedy swiftly, and to enhance a procedure for providing medical and nursing expenses.

26. Korea established a consultative group where victims and the Government participate into. The consultative group shares the current progress of supports, and discusses the victims' request to the Government. The MOE has been running a web site dedicated to overall supports for the victims. In the web site, the Government shares the important information with the victims, and the victims can check their status and support level.

27. The ARECS amendment states that all chemical substances manufactured or imported one ton or more a year should be registered by manufacturer or importer by 2030 in a phased manner, which came into effect in January 2019. The Act on Consumer Chemical Products and Biocides Safety specifies that a company who intends to place biocidal substance or product of higher risk concern on the market should assess the risks and obtain an approval of the Government before placing them on the market, which calls pre-approval system. With these systems, Korea introduced a universal chemical tracking system where a checking number is issued to chemical substance and is indicated on container or package. This aims to manage the entire life cycle of chemical substance, from manufacture/import to storage and sales. Within the supply chain, purchaser should be provided the name, concentration, classification and labelling information of hazardous substance.
28. Since 2016, the MOE runs a web site and a mobile application where the public can search the information about main components of risk-concerned products with a single click.