Soil Contamination Prevention and Control Law of the People's Republic of China

(Adopted at the 5th meeting of the Standing Committee of the 13th National People's Congress on August 31, 2018)

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Chapter I General Provisions

Article 1 This Law is enacted for the purpose of protecting and improving the ecological environment, preventing and controlling soil contamination, safeguarding the public health, promoting the sustainable use of soil resources, promoting the construction of ecological civilization, and facilitating the sustainable economic and social development.

Article 2 This Law applies to the soil contamination prevention and control and related activities within the territory of the People's Republic of China and other sea areas under its jurisdiction.

The term "soil contamination" as used in this Law refers to the phenomenon that

a certain substance enters the surface soil of land due to human factors, thus causing changes in chemical, physical or biological properties of soil, affecting soil function or effective utilization, endangering public health or destroying the ecological environment.

Article 3 The soil contamination prevention and control shall be conducted under the principle of "prevention first, protection paramount, classified management, risk management and control, contamination accountability and public participation".

Article 4 All organizations and individuals have the obligation to protect the soil and prevent soil contamination.

Land-use rights holders that are engaged in land development and utilization and enterprises, institutions and other business operators that are engaged in business activities shall take effective measures to prevent and reduce soil contamination and be accountable for the soil contamination caused

Article 5 The local governments at all levels shall be responsible for the soil contamination prevention and safe utilization within their jurisdiction.

The State adopts the soil contamination prevention and control target accountability and performance assessment systems. Under the systems, the fulfillment of the soil contamination prevention and control targets will be one of the metrics to assess the performance of the local governments at all levels and the persons in charge, as well as the performance of departments responsible for soil contamination monitoring and management under the governments at or above the county level and the responsible persons.

Article 6 The local governments at all levels shall strengthen leadership over the prevention and control of soil contamination, and play a positive role in organizing, coordinating and urging relevant departments to perform their duty of supervision and management of soil contamination prevention and control in accordance with law.

Article 7 The competent department of ecological environment under the State Council shall adopt a unified supervision and management system for the prevention and control of soil contamination throughout the country; the competent departments of agriculture and rural affairs, natural resources, housing and urban construction, forestry and grassland under the State Council shall do their parts in supervising and managing soil contamination prevention and control within their terms of reference.

The competent departments of ecological environment under the local governments shall adopt a unified supervision and management system for the prevention and control of soil contamination within their jurisdiction; the competent departments of agriculture and rural affairs, natural resources, housing and urban

construction, forestry and grassland under the local governments shall do their parts in supervising and managing soil contamination prevention and control within their terms of reference.

Article 8 The State adopts a soil environment information sharing mechanism.

The competent department of ecological environment under the State Council shall, in conjunction with the competent departments of agriculture and rural affairs, natural resources, housing and urban construction, water conservancy, health, forestry and grassland under the State Council, establish a basic soil environment database and a nationwide soil environment information platform, to realize data dynamic updating and information sharing.

Article 9 The State supports the scientific and technological research on the prevention and control, remediation and monitoring of soil contamination and the application of research results, encourages the development of the soil contamination prevention and control industry, intensifies training of professionals for soil contamination prevention and control, and promotes the scientific and technological progress in this field.

The State encourages international exchanges and cooperation in soil contamination prevention and control.

Article 10 The local governments at all levels and the relevant departments, grassroots voluntary associations and news media shall strengthen publicity and education on soil contamination prevention to enhance the public awareness and guide the public to participate in the initiative in accordance with law.

Chapter II Planning, Standards, Survey and Monitoring

Article 11 The local governments at or above the county level shall incorporate the soil contamination prevention and control into the national economic and social development plan and the environmental protection plan.

The competent departments of ecological environment under the local governments at or above the city (divided into districts) level shall, in conjunction with the competent departments of development and reform, agriculture and rural affairs, natural resources, housing urban and rural construction, forestry and grassland, prepare a plan for soil contamination prevention and control based on the findings of the land use and contamination survey and monitoring, and by taking into account the environment protection plan, and report it to the local governments at the same level for approval.

Article 12 The competent department of ecological environment under the State

Council shall, by having regard to the soil contamination status, public health risks, ecological risks, scientific and technological levels and the land use, establish national standards for management and control of soil contamination risks to improve the standard system in this field.

The local governments at the provincial level may establish local standards for management and control of soil contamination risks for items unspecified in the above national standards, and may establish stricter standards for items already specified in the national standards. The local standards for management and control of soil contamination risks shall be reported to the competent department of ecological environment under the State Council for the record.

The standards for management and control of soil contamination risks are mandatory.

The State supports research on soil environmental background value and environmental criteria.

Article 13 In formulating the standards for management and control of soil contamination risks, experts shall be invited for review and argumentation, and opinions of relevant departments, industry associations, enterprises, institutions and the public shall be solicited.

The standards for management and control of soil contamination risks shall be regularly assessed for implementation and revised based on the assessment results.

The competent departments of ecological environment under the local governments above the provincial level shall publish such standards on their website for public access and free downloading.

Article 14 The State Council play a leading role in the national soil contamination survey. The competent department of ecological environment under the State Council shall, in conjunction with the competent departments of agriculture and rural affairs, natural resources, housing and urban and rural construction, forestry and grassland at the same level, organize a national soil contamination survey at least every ten years.

The relevant departments of the State Council and the local governments at or above the city (divided into districts) level may organize a detailed survey of soil contamination in light of actual situations of the industry and the jurisdiction.

Article 15 The State adopts a soil environment monitoring system.

The competent department of ecological environment under the State Council

shall, in conjunction with the competent departments of agriculture and rural affairs, natural resources, housing and urban and rural construction, water conservation, hygiene and health, forestry and grassland at the same level, establish a monitoring website and uniformly deploy the national soil environment monitoring stations (points).

Article 16 The competent departments of agriculture and rural affairs, forestry and grasslands under the local governments shall, in conjunction with the competent departments of ecological environment and natural resources, carry out monitoring of agricultural land, with emphasis on land:

- (1) Where the content of pollutants in agricultural products exceeds the standard;
- (2) Used or ever used as sewage irrigation areas;
- (3) Used or ever used for large-scale breeding, solid waste dumping or landfilling;
- (4) Ever used as mining or industrial lands or where a major or extraordinarily serious contamination accident occurred;
- (5) Neighboring any facilities producing, storing, utilizing and disposing toxic and hazardous substances:
- (6) Other circumstances as stipulated by the competent departments of agriculture and rural affairs, forestry and grasslands, ecological environment and natural resources under the State Council.

Article 17 The competent departments of ecological environment under the local governments shall, in conjunction with the competent departments of natural resources, carry out monitoring of construction land, with emphasis on land:

- (1) Ever used to produce, use, store, recycle or dispose of toxic and hazardous substances;
 - (2) Ever for solid waste dumping and landfilling;
 - (3) Where a major or extraordinarily serious contamination accident occurred;
- (4) Other circumstances as stipulated by the competent departments of ecological environment and natural resources under the State Council.

Chapter III Prevention and Protection

Article 18 All construction projects involving land use or causing potential soil contamination shall be subject to environmental impact assessment in accordance with law. The environmental impact assessment shall contain the possible adverse effects on the soil and the corresponding preventive measures to be taken.

Article 19 Entities and individuals that produce, use, store, transport, collect, dispose of or discharge toxic or hazardous substances shall take effective measures to prevent leakage, loss and spread of toxic and hazardous substances to avoid soil contamination.

Article 20 The competent department of ecological environment under the State Council shall, in conjunction with the competent departments of hygiene and health and other departments at the same level, comprehensively assess the toxic and hazardous substances in the soil based on the severity of harm to the public health and ecological environment, and release and update from time to time the catalog of toxic and hazardous substances in the soil under key control.

Article 21 The competent departments of ecological environment under the local governments at or above the city (divided into districts) level shall, in accordance with the regulations of the competent department of ecological environment under the State Council and based on the discharge of toxic and hazardous substances, prepare and release a catalog of entities under the key supervision for soil contamination (the "catalog") within the their jurisdiction to the public and update it from time to time.

The entities under the key supervision for soil contamination shall fulfill the following obligations:

- (1) Strictly control the discharge of toxic and hazardous substances, and report such discharge to the competent departments of ecological environment on an annual basis;
- (2) Establish a potential soil contamination identification system to ensure the leakage, loss and spread of toxic and hazardous substances may be prevented in a continuous and effective manner.
- (3) Develop and implement a self-monitoring program, and report the findings to the competent departments of ecological environment.

The obligations described in the preceding paragraph shall be clearly stated in the pollutant discharge permit.

Entities under the key supervision for soil contamination shall be responsible for the authenticity and accuracy of the monitoring data. The competent departments of ecological environment shall timely identify the cause of any abnormal monitoring data provided by entities under the key supervision for soil contamination.

The competent departments of ecological environment under the local governments at or above the city (divided into districts) level shall conduct regular monitoring of the soil around the aforesaid entities.

Article 22 Enterprises or institutions shall take corresponding measures to prevent and control soil contamination when dismantling facilities, equipment, buildings or structures.

Entities under the key supervision for soil contamination shall develop a work plan for prevention and control of soil contamination, including emergency measures, and report it to the competent departments of ecological environment, industry and information technology under the local governments for the record before dismantling any facilities, equipment, buildings or structures.

Article 23 The competent departments of ecological environment and natural resources under the local governments at all levels shall strengthen the supervision and management of the prevention and control of soil contamination in the mining areas in accordance with law, and strictly control the discharge of key pollutants that may cause soil contamination based on relevant standards and according to the requirements for total quantity control.

Entities engaged in operation and management of tailings ponds shall strengthen the safety management of such ponds and take measures to prevent soil contamination in accordance with the provisions. Entities engaged in operation and management of dangerous, hazardous or sick tailings ponds or other ponds under key supervision shall conduct soil contamination monitoring and regular assessment in accordance with the provisions.

Article 24 The State encourages the use of new technologies and materials in the information, network, lightning protection, grounding and other projects in fields of construction, communications, power, transportation and water conservancy, among others, to prevent soil contamination.

Use of any resistance reducing product with excessive heavy metals in the soil is forbidden.

Article 25 Entities constructing or operating centralized sewage treatment facilities or solid waste disposal facilities shall take measures to prevent soil contamination in accordance with applicable laws and regulations and relevant standards

The competent departments of ecological environment under the local

governments shall regularly monitor the soil around the centralized sewage treatment facilities and solid waste disposal facilities; entities operating centralized sewage treatment facilities or solid waste disposal facilities that fail to meet the requirements of laws, regulations or relevant standards, as suggested by the monitoring results, shall take corresponding improvement measures.

The local governments at all levels shall comprehensively plan and construct the urban and rural domestic sewage and garbage treatment and disposal facilities and ensure their normal operation to prevent soil contamination.

Article 26 The competent departments of agriculture and rural affairs, forestry and grasslands under the State Council shall develop plans, improve relevant standards and measures, strengthen guidance on the use and total quantity control of pesticides and fertilizers in agricultural land, and further restrict the use of agricultural films.

The competent department of agriculture and rural affairs under the State Council shall strengthen the registration of pesticides and fertilizers, and organize the safety assessment of effects of pesticides and fertilizers on the soil environment.

The standards established for agricultural inputs and their packages such as the pesticides, veterinary drugs, fertilizers, feeds, agricultural films, and the quality standards for farmland irrigation water shall meet the requirements for soil contamination prevention and control.

Article 27 The competent departments of agriculture and rural affairs, forestry and grasslands under the local governments shall carry out publicity and provide technical training on agricultural land soil contamination prevention and control, support the provision of special agricultural production services, and educate agricultural producers on rational use of agricultural inputs such as pesticides, veterinary drugs, fertilizers, feed and agricultural films, to control the quantity of pesticides, veterinary drugs and fertilizers.

The competent departments of agriculture and rural affairs under the local governments shall encourage agricultural producers to adopt farming measures conducive to soil contamination prevention, such as the combination of farming and breeding, crop rotations and fallow; support soil improvement, soil fertility enhancement and other measures that are conducive to soil conservation and cultivation; and support the construction of livestock manure treatment and utilization facilities.

Article 28 Discharge of sewage or sludge containing excessive heavy metals or other hazardous substances, or dredged sediments, tailings or slag likely causing soil contamination to agricultural land is strictly forbidden.

Relevant departments under the local governments at or above the county level shall strengthen the supervision and management of the collection, storage, utilization and disposal of excrements of livestock, biogas residue and biogas slurry to prevent soil contamination.

Farmland irrigation water shall meet corresponding quality standards, so as to prevent soil, groundwater and agricultural products from being contaminated. The competent departments of ecological environment under the local governments shall, in conjunction with the competent departments of agriculture and rural affairs and water conservancy, strengthen the management of quality of farmland irrigation water by conducting monitoring and examinations.

Article 29 The State encourages and supports the agricultural producers to take the following measures:

- (1) use low-toxic, low-residue pesticides and advanced spraying techniques;
- (2) use up-to-standard organic fertilizers and high-efficiency fertilizers;
- (3) conduct fertilization based on soil testing results and control pests through biological means;
 - (4) use biodegradable agricultural films;
 - (5) comprehensively utilize straws and remove pollutant-rich straw;
 - (6) improve acidic soil in accordance with regulations.

Article 30 Production, sale or use of agricultural inputs that are expressly prohibited by the State is forbidden.

Producers, sellers and users of agricultural inputs shall timely collect empty packages of pesticides and fertilizers, and agricultural films, and hand them over to the special institutions or organizations for harmless treatment. The specific measures shall be formulated by the competent department of agriculture and rural affairs under the State Council in conjunction with the competent department of ecological environment at the same level.

The State uses incentives to encourage and support entities and individuals to collect empty packages of agricultural inputs and agricultural films.

Article 31 The State shall strengthen the protection of non-contaminated soil.

The local governments at all levels shall pay special attention to the protection of non-contaminated cultivated land, forestland, grassland and drinking water sources.

The local governments at all levels shall strengthen the protection of natural reserves such as national parks to maintain their ecological functions.

The unused land shall be protected from contamination and damage.

Article 32 The local governments at or above the county level and the relevant departments under them shall strictly observe the rules concerning location selection of industrial entities as set out in the overall land use plan and the urban and rural plan, and prohibit the construction, reconstruction, and expansion of projects that may cause soil contamination in areas near the residential areas, schools, hospitals, nursing homes or homes for the ages.

Article 33 The State intensifies the protection and rational utilization of soil resources. The topsoil stripped during the development and construction process shall be collected and stored separately, and where the conditions permit, be used for land reclamation, soil improvement, land cultivation and greening.

Use of industrial solid wastes or domestic garbage containing excessive heavy metals or other toxic or harmful substances or contaminated soil for land reclamation is strictly forbidden.

Article 34 The import of soil, where necessary due to special reasons such as for scientific research, shall be in compliance with relevant entry and exit inspection and quarantine regulations of the state.

Chapter IV Risk Management and Remediation

Section 1 General Regulations

Article 35 The soil contamination risk management and control and remediation efforts include soil contamination survey and soil contamination risk assessment, risk management and control, remediation, risk management and control effect assessment, remediation effect assessment and later-phase management.

Article 36 A report of soil contamination shall be prepared following the completion of a soil contamination survey.

The survey report shall mainly include the basic information about the land and whether the content of pollutants exceeds the standards for management and control of soil contamination risks. If the pollutant content exceeds such standards, the survey report shall also include the type and source of contamination, and whether the

groundwater is contaminated.

Article 37 An assessment report shall be prepared following the completion of a soil contamination risk assessment.

The assessment report shall mainly include the following:

- (1) the information about major pollutants;
- (2) the scope of contamination of soil and groundwater;
- (3) the quality safety risks, public health risks or ecological risks imposed by agricultural products;
- (4) the targets and basic requirements for risk management and control and remediation

Article 38 The risk management and control activities shall be tailored to local conditions, and be scientific, reasonable, targeted and effective.

The risk management and control activities shall not cause new contamination to the soil or the surrounding environment.

Article 39 Relevant departments under the local governments have the right, prior to the implementation of the risk management and control activities and in light of actual situations, to require the persons accountable for soil contamination and land-use rights holders to remove contamination sources to prevent the spread of contamination.

Article 40 The waste water, waste gas and solid wastes generated from risk management and control or remediation activities shall be processed and disposed of in accordance with relevant regulations to meet the environmental protection standards.

The solid wastes generated from risk management and control or remediation activities, and the dismantled facilities, equipment, buildings or structures that belong to hazardous wastes shall be disposed of in accordance with laws, regulations and relevant standards.

During the remediation period, a bulletin board shall be set up to disclose to the public relevant information and the environmental protection measures that have been taken.

Article 41 Entities to be engaged in transport of contaminated soil in the process

of remediation shall first develop a transport plan stating the transport time, mode, route and the quantity, destination and final disposal measures of the contaminated soil, and submit it to the competent departments of ecological environment in the places where the soil is to be transported out and transported in for approval.

The contaminated soil to be transported that is classified as hazardous waste shall be disposed of by the above entities in accordance with laws, regulations and relevant standards.

Article 42 An effect assessment report shall be developed following the completion of the assessment of risk management and control or remediation.

The effect assessment report shall mainly deal with the issue of whether the targets for risk management and control or remediation as set out in the soil contamination risk assessment report are met.

Following the risk management and control or remediation, the persons accountable for soil contamination shall conduct later-phase management as required in accordance with relevant requirements.

Article 43 Entities to be engaged in soil contamination survey, soil contamination risk assessment, risk management and control, remediation, risk management and control effect assessment, remediation effect assessment, or later-phase management shall have obtained the required expertise.

Entities commissioned to conduct activities described in the preceding paragraph shall be responsible for the authenticity, accuracy and completeness of the survey report, the risk assessment report, the risk management and control effect assessment report, or the remediation effect assessment report issued by them, and for the consequence of the risk management and control, remediation or later-phase management as agreed.

Article 44 In case of any unexpected event may cause soil contamination, the local governments and the relevant departments under them, enterprises, institutions and business entities shall immediately take emergency measures to prevent soil contamination, and conduct soil contamination monitoring, survey, soil contamination risk assessment, risk management and control and remediation in accordance with this Law.

Article 45 The persons accountable for soil contamination are obliged to implement the soil contamination risk management and control and remediation. If the persons accountable for soil contamination are unidentifiable, the aforesaid obligation shall be shifted over to the land-use rights holders.

The local governments and the relevant departments under them may organize the soil contamination risk management and control or remediation in light of actual conditions.

The State encourages and supports relevant parties to voluntarily implement soil contamination risk management and control.

Article 46 The expenses arising from implementation or organization of the soil contamination survey, soil contamination risk assessment, risk management and control, remediation, risk management and control effect assessment, remediation effect assessment and later-phase management shall be borne by the persons accountable for soil contamination.

Article 47 In case of change of the persons accountable for soil contamination, the entities or individuals that inherit the creditor's rights and debts of such persons shall be liable for the soil contamination risk management and control and remediation, and bear relevant expenses.

Article 48 If the persons accountable for soil contamination are unclear or controversial, and if the land involved is the agricultural land, such persons shall be determined by the competent departments of agriculture and rural affairs, forestry and grassland, in conjunction with the competent departments of ecological environment and natural resources under the local governments; if the land involved is the construction land, such persons shall be determined by the competent departments of ecological environment and natural resources under the local governments. The specific method shall be developed by the competent department of ecological environment under the State Council in conjunction with relevant departments.

Section 2 Agricultural Land

Article 49 The State adopts a classified management system for agricultural land. The agricultural land is divided into three categories: land under priority protection, land for safe use and land under strict control, based on the degree of soil contamination and relevant standards.

Article 50 The local governments at or above the county level shall classify the qualifying land under priority protection as permanent capital farmland for strict protection in accordance with law.

No construction project that may cause soil contamination shall be permitted in the concentration areas of permanent capital farmland. If such project has been completed, the close-down and demolition shall be completed within the specified time. Article 51 When the unused land or reclaimed land is to be used as cultivated land, the competent departments of agriculture and rural affairs shall, in conjunction with the competent departments of ecological environment and natural resources under the local governments, conduct a survey on soil contamination and conduct classified management in accordance with law.

Article 52 For any farmland exposed to soil contamination risks as suggested by the soil contamination survey, detailed survey, monitoring or on-site examination, the competent departments of agriculture and rural affairs, forestry and grassland shall, in conjunction with the competent departments of ecological environment and natural resources under the local governments, conduct a survey on soil contamination.

If the survey results show that the content of pollutants in soil exceeds the standards for management and control of soil contamination risks, the competent departments of agriculture and rural affairs, forestry and grassland shall, in conjunction with the competent departments of ecological environment and natural resources under the local governments, conduct a soil contamination risk assessment and manage the farmland under the agricultural land classified management system.

Article 53 For agricultural land in the category of land for safe use, the competent departments of agriculture and rural affairs, forestry and grassland under the local governments shall develop a safe use plan by taking into account the main crop varieties and planting habits.

The safe use plan shall contain the following:

- (1) Agronomic regulation and alternative planting;
- (2) Coordinated monitoring and assessment of soil and agricultural products on a regular basis;
- (3) Technical guidance and training for farmers, farmers' professional cooperatives and other agricultural production and operation entities;
 - (4) Other risk management and control measures.

Article 54 For agricultural land under strict control, the competent departments of agriculture and rural affairs, forestry and grassland under the local governments shall adopt the following risk management and control measures:

- (1) Propose areas for prohibition of production of specific agricultural products, and report them to the local governments at the same level for approval;
 - (2) Conduct coordinated monitoring and assessment of soil and agricultural

products in accordance with regulations;

- (3) Provide technical guidance and training for farmers, farmers' professional cooperatives and other agricultural production and operation entities;
 - (4) Other risk management and control measures.

The local governments at all levels and the relevant departments under them shall encourage the application of risk management and control measures for land under strict control, such as adjusting the plantation structure, returning farmland to forests and grasslands, returning farmland to wetlands, crop rotation, land fallow, rotational grazing and rest grazing, and render appropriate policy support.

Article 55 For agricultural land in the categories of land for safe use and land under strict control that affects or likely affects the safety of ground water and drinking water, the competent department of ecological environment shall, in conjunction of competent departments of agriculture and rural affairs, forestry and grassland under the local governments, develop a contamination prevention and control plan and take corresponding measures.

Article 56 For agricultural land in the categories of land for safe use and land under strict control, the persons accountable for soil contamination shall, in accordance with relevant provisions of the State and the requirements of the soil contamination risk assessment report, adopt corresponding risk control measures and regularly report to the competent departments of agriculture and rural affairs, forestry and grassland under the local governments.

Article 57 For agricultural land that needs to be remediated due to excessive content of pollutants in agricultural products, the persons accountable for soil contamination shall develop a remediation plan and report it to the competent departments of agriculture and rural affairs, forestry and grassland under the local governments for the record and approval. The remediation plan shall contain the measures for prevention and control of groundwater contamination.

In remediation, bioremediation measures that do not affect the agricultural production or reduce the soil production function shall be give priority to block or reduce pollutants entering the edible parts of crops, and ensure the quality and safety of agricultural products.

Following the completion of risk management and control and remediation, the persons accountable for soil contamination shall commission relevant agencies to assess the effects of risk control and remediation separately, and deliver the assessment report to the competent departments of agriculture and rural affairs, forestry and grassland under the local governments for the record.

Rural collective economic organizations and their members, farmers' professional cooperatives and other agricultural production and management entities have the obligation to provide assistance in soil contamination risk management and control and remediation.

Section III Construction Land

Article 58 The State practices a catalog system for construction land subject to soil contamination risk management and control and remediation.

The catalog of construction land subject to soil contamination risk management and control and remediation shall be prepared by the competent department of ecological environment, in conjunction with the competent departments of natural resources of the provincial local governments, be disclosed to the public in accordance with regulations, and be updated from time to time in light of the progress of the risk management and control and remediation efforts.

Article 59 For any construction land exposed to soil contamination risks as suggested by the soil contamination survey, detailed survey, monitoring or on-site examination, the competent departments of ecological environment under the local governments shall require the land-use rights holders to conduct a soil contamination survey in accordance with relevant regulations.

Construction land that is to be used for residential, public management or public service purpose shall be subject to a soil contamination survey in accordance with relevant regulations beforehand.

The soil contamination survey report described in the preceding two paragraphs shall be submitted to the competent departments of ecological environment under the local governments, which will conduct a review together with the competent departments of natural resources at the same level.

Article 60 If the survey results show that the content of pollutants in soil of the construction land exceeds the standards for management and control of soil contamination risks, the persons accountable for soil contamination or the land-use rights holders shall conduct a soil contamination risk assessment in accordance with regulations of the competent department of ecological environment under the State Council, and submit an assessment report to the competent departments of ecological environment under the local governments at the provincial level.

Article 61 The competent departments of ecological environment under the local governments at the provincial level shall, in conjunction with the competent departments of natural resources and other departments, review the soil contamination

risk assessment report in accordance with regulations of the competent department of ecological environment under the State Council, and incorporate the land that is subject to soil contamination risk management and control and remediation to the abovementioned catalog and make a report to the competent department of ecological environment under the State Council on a regular basis.

Land in the catalog of construction land subject to soil contamination risk management and control and remediation shall not be used for residential, public management and public service purposes.

Article 62 For land in the catalog, the persons accountable for soil contamination shall take corresponding risk management and control measures in accordance with relevant regulations of the State and the requirements of the soil contamination risk assessment report, and regularly make a report to the competent departments of ecological environment under the local governments. The risk management and control measures shall cover the prevention and control of groundwater contamination.

Article 63 For land in the catalog, the competent departments of ecological environment under the local governments may, in light of the actual situations, take the following risk management and control measures:

- (1) Propose the isolated areas and report them to the local governments at the same level for approval;
 - (2) Conduct monitoring of soil and groundwater contamination;
 - (3) Other risk management and control measures.

Article 64 For land in the catalog that needs to be remediated, the persons accountable for soil contamination shall develop a remediation plan based on the comprehensive land utilization plan and the rural and urban plan, and report it to the competent departments of ecological environment under the local governments for the record and approval. The remediation plan shall contain the measures for prevention and control of groundwater contamination.

Article 65 Following the completion of risk management and control and remediation, the persons accountable for soil contamination shall commission relevant agencies to assess the effects of risk control and remediation separately, and deliver the assessment report to the competent departments of ecological environment under the local governments for the record.

Article 66 For construction land that meets the targets of risk management and control and remediation as set out in the soil contamination risk assessment report, the

persons accountable for soil contamination and the land-use rights holders may apply to the competent departments of ecological environment under the local governments at the provincial level for removal of such land from the catalog.

The competent departments of ecological environment under the local governments at the provincial level shall, in conjunction with the competent departments of natural resources, organize the review of the assessment reports on the risk management and control effect and the remediation effect, and timely remove the land that meets the targets of risk management and control and remediation as set out in the soil contamination risk assessment report out of the catalog, and make a disclosure to the public in accordance with regulations, and a report to the competent department of ecological environment under the State Council on a regular basis.

Construction land that fails to meet the targets of risk management and control and remediation as set out in the soil contamination risk assessment report shall not be used for any project unrelated to the risk management and control or remediation.

Article 67 The land occupied by business entities under the key supervision for soil contamination shall be subject to a soil contamination survey by the land-use rights holders in accordance with relevant regulations before it is used for any other purpose or the use rights of which are recovered or transferred. The soil contamination survey report shall be submitted to the real estate registration authority under the local governments as part of the real estate registration materials, and be reported to the competent departments of ecological environment under the local governments for the record.

Article 68 If the land-use rights have been recovered by the local governments and the accountability for soil contamination resides with the original land-use rights holders, the local governments shall organize the soil contamination risk management and control or remediation.

Chapter V Protection and Supervision

Article 69 The State adopts fiscal, taxation, price, financial and other economic policies and measures that are conducive to the prevention and control of soil contamination.

Article 70 The local governments at all levels shall strengthen the prevention and control of soil contamination and grant funds for:

- (1) Scientific and technological research and development projects and demonstration projects concerning the prevention and control of soil contamination;
 - (2) The soil contamination survey, monitoring, identification of persons

accountable for soil contamination, risk assessment, risk management and control, and remediation activities organized by the local governments at all levels and the relevant departments under them.

- (3) Responses to emergencies involving soil contamination by the local governments at all levels and the relevant departments under them;
- (4) Other matters in relation to the prevention and control of soil contamination as prescribed by the local governments at all levels.

Performance management and audit supervision shall be strengthened to ensure the funds are used in an effective manner.

Article 71 The State has increased investments in soil contamination prevention and control and established a funding system for this purpose. Special funds from the central government and provincial governments for the prevention and control of soil contamination shall be established for soil contamination risk management and control or remediation when the persons accountable for soil contamination or the land-use rights holders are unidentifiable or for other matters regulated by the government.

For contaminated land generated before the date of this Law and for which the persons accountable for soil contamination are unidentifiable, the land-use rights holders that are actually performing the soil contamination risk management and control or remediation may apply for such funds for the purpose of soil contamination risk management and control or remediation.

The specific management measures for the soil contamination prevention and control funds shall be formulated by the competent financial department under the State Council in conjunction with the competent departments of ecological environment, agriculture and rural affairs, natural resources, housing and urban construction, and forestry and grassland at the same level.

Article 72 The State encourages financial institutions to increase credit lending to soil contamination risk management and control projects.

The State encourages financial institutions to conduct a soil contamination survey when they handle the land rights mortgage business.

Article 73 Entities engaged in the soil contamination risk management and control or remediation are entitled to tax benefits prescribed by laws and administrative regulations.

Article 74 The State encourages all sectors of the society to donate to the

prevention and control of soil contamination, and donators are entitled to tax preferences in accordance with laws and administrative regulations.

Article 75 The local governments at or above the county level shall incorporate the prevention and control of soil contamination into the annual report on the environmental conditions and fulfillment of environmental protection targets to be submitted to the people's congress or the standing committee of the people's congress at the same level.

Article 76 The competent departments of ecological environment under the local governments at or above the provincial level shall, in conjunction with the relevant departments, meet the main leaders of the local governments at or above the city (divided into districts) level and the relevant departments under them in the places where the soil contamination issue is prominent, or insufficiently addressed, or arises the people's strong concern, and ask them to timely adopt corrective measures. Information about the meeting and the corrective measures to be adopted shall be disclosed to the public.

Article 77 The competent departments of ecological environment, the environmental law enforcement agencies and other departments responsible for the supervision and management of soil contamination prevention and control shall have the right to conduct on-site inspections and sampling at enterprises, institutions or other business entities engaged in activities that may cause soil contamination, while requesting them to provide relevant materials and make explanations for relevant issues.

The entities subject to the inspection shall be cooperative during the inspection process by providing authentic information required.

The departments, agencies and their workers involved in the on-site inspection shall keep confidential the trade secrets of the entities inspected.

Article 78 The competent departments of ecological environment and other departments responsible for the supervision and management of contamination prevention and control may seize and detain relevant facilities, equipment and articles of enterprises, institutions and other business entities that discharge toxic and hazardous substances in violation of laws and regulations that cause or may cause serious soil contamination, or are expected to destroy or conceal relevant evidence.

Article 79 The departments responsible for supervision and management of workplace safety under the local governments shall supervise the fulfillment of the statutory obligation of soil contamination prevention by entities engaged in operation and management of tailings ponds to prevent accidents that may contaminate the soil; The competent departments of ecological environment under the local governments

shall strengthen the supervision, inspection and regular assessment of the prevention and control of soil contamination by the tailings ponds, and promptly urge entities engaged in operation and management of tailings ponds to take corresponding measures to address the potential risks identified,

The local governments and the relevant departments under them shall, in accordance with law, strengthen the supervision and inspection of illegal discharge of toxic and hazardous substances into unused land such as deserts, tidal flats, saline-alkali land and marshes.

Article 80 The competent departments of ecological environment under the local governments at or above the provincial level and other departments responsible for the supervision and management of soil contamination prevention and control shall include entities and individuals engaged in soil contamination survey, soil contamination risk assessment, risk management and control, remediation, risk management and control effect assessment, remediation effect assessment and later-phase management into the credit system to establish credit records for them, and record their violations into the social credit archives and the national credit information sharing platform as well as the national enterprise credit information disclosure system for disclosure to the public.

Article 81 The competent departments of ecological environment and other departments responsible for the supervision and management of soil contamination prevention and control shall disclose the information on soil contamination and the prevention and control efforts in accordance with law.

The competent department of ecological environment under the State Council is responsible for the unified disclosure of the national soil environment information; the competent departments of ecological environment under the local governments at the provincial level are responsible for the unified disclosure of soil environment information within their jurisdiction. The competent departments of ecological environment shall timely inform the competent departments of agriculture and rural affairs, hygiene and health, and food safety at the same level of significant soil environment information concerning the production areas of major edible agricultural products.

Citizens, legal persons and other organizations have the right to obtain information on soil contamination and the prevention and control efforts, and to participate in and supervise the prevention and control of soil contamination in accordance with law.

Article 82 The soil contamination survey report, monitoring data, the sampling report, the soil contamination risk assessment report, the risk management and control effect assessment report and the remediation effect assessment report shall be timely

uploaded to the national soil environment information platform.

Article 83 The news media shall have the right to supervise the prevention and control of soil contamination for any violation of laws and regulations, and the units and individuals under supervision shall not retaliate against them.

Article 84 All entities and individuals shall have the right to report the soil contamination to the competent departments of ecological environment and other departments responsible for the supervision and management of soil contamination prevention and control.

The competent departments of ecological environment and other departments responsible for the supervision and management of soil contamination prevention and control shall publicize the means of reporting to the public to enable the reporting.

The department receiving the report shall timely respond and keep confidential the information of the reporter; In case of real-name reporting and the reported case is verified to be true, the reporter shall be rewarded.

If the report is against the entity where the reporter works, the entity shall not retaliate against the reporter by any means such as dismissing him or changing the labor contract.

Chapter VI Legal Liability

Article 85 If any local governments, or the competent departments of ecological environment or other departments responsible for the supervision and management of soil contamination prevention and control fail to perform their duties in accordance with the provisions of this Law, an administrative sanction shall be imposed on the persons in charge and other directly responsible persons.

Where an administrative sanction that should have been imposed in accordance with the provisions of this Law fails to be imposed, the competent department at a higher level may directly impose such sanction.

Article 86 Entities that conduct any of the following activities in violation of provisions of this Law will be ordered by the competent departments of ecological environment or other departments responsible for the supervision and management of soil contamination prevention and control to take corrective measures and be subject to a fine or a closedown if they refuse to make corrections:

(1) Entities under the key supervision for soil contamination failed to develop and implement a self-monitoring plan, or failed to report the monitoring data to the competent departments of ecological environment;

- (2) Entities under the key supervision for soil contamination falsified or forged monitoring data;
- (3) Entities under the key supervision for soil contamination failed to report the discharge of toxic and hazardous substances on a yearly basis or failed to develop a system for identifying and eliminating hidden risks of soil contamination;
- (4) Enterprises and institutions failed to adopt corresponding measures for prevention and control of soil contamination when demolishing facilities, equipment, buildings or structures; or entities under the key supervision for soil contamination failed to develop or implement a plan for prevention and control of soil contamination;
- (5) Entities engaged in the operation and management of tailings ponds failed to take measures to prevent soil contamination in accordance with the provisions;
- (6) Entities engaged in the operation and management of tailings ponds failed to monitor the soil contamination in accordance with the provisions;
- (7) Entities engaged in the construction and operation of centralized sewage treatment facilities or solid waste disposal facilities failed to take measures to prevent soil contamination in accordance with laws, regulations and relevant standards.

For any activity described in the preceding paragraph, a fine of not less than RMB 20,000 but not more than RMB 200,000 will be imposed; For any activity described in item 2, 4, 5 and 7 of the preceding paragraph that caused serious consequences, a fine of not less than RMB 200,000 but not more than RMB 2 million will be imposed.

Article 87 Entities that discharge sewage or sludge containing excessive heavy metals or other toxic and hazardous substances or dredged sediments or tailings or slag that may cause soil contamination to agricultural land in violation of the provisions of this Law will be ordered by the competent departments of ecological environment under the local governments to make corrections, and be subject to a fine of not less than RMB 100,000 but not more than RMB 500,000; if the circumstances are serious, a fine of not less than RMB 500,000 but not more than RMB 2 million may be imposed, and the case may be transferred to the public security organ, and the persons in charge and other directly responsible personnel will face a detention of more than five days but less than fifteen days; The illegal income, if any, will be confiscated.

Article 88: Producers, sellers and users of agricultural inputs that failed to timely collect the empty packages of agricultural inputs such as fertilizers or films as

required by this Law, or failed to timely hand over such empty packages to the special agencies or organizations for harmless treatment in accordance with the provisions will be ordered by the competent departments of agriculture and rural affairs under the local governments to make corrections and be subject to a fine of not less than RMB 10,000 but not more than RMB 100,000; if the users of agricultural inputs are individuals, the fine will be between RMB 200 and RMB 2,000.

Article 89 Entities that use industrial solid wastes, domestic garbage or contaminated soil containing excessive heavy metals or other toxic or hazardous substances for land reclamation in violation of the provisions of this Law will be ordered by the competent departments of ecological environment under the local governments to make corrections and be subject to a fine of not less than RMB 100,000 but not more than RMB 1million; the illegal income, if any, will be confiscated.

Article 90 Entities that are commissioned to conduct soil contamination survey, soil contamination risk assessment, risk management and control effect assessment or remediation effect assessment act in violation of the provisions of this Law, or issue a false survey report, risk assessment report, risk management and control effect assessment report, or remediation report will be subject to a fine of not less than RMB 100,000 but not more than RMB 500,000 imposed by the competent departments of ecological environment under the local governments. If the circumstances are serious, the entities will be banned from engaging in the above-mentioned business and be subject to a fine of not less than RMB 500,000 but not more than 1 million; the illegal income, if any, will be confiscated.

In case of provision of a false report as described in the preceding paragraph, the persons directly in charge and other directly responsible persons will be subject to a fine of not less than RMB 10,000 but not more than RMB 50,000 imposed by the competent departments of ecological environment under the local governments. If the circumstances are serious, the entities will be banned from engaging in the business specified in the preceding paragraph for ten years; if a crime is constituted, the entities will be forever banned from engaging in the business specified in the preceding paragraph.

If the entities described in the first paragraph of this Article maliciously collude with the commissioning party to produce a false report, thus causing personal or property damage to others, they shall also bear the joint and several liability with the commissioning party.

Article 91 Entities that conduct any of the following activities in violation of the provisions of this Law will be ordered by the competent departments of ecological environment under the local governments to make corrections, and be subject to a fine of not less than RMB 100,000 but not more than RMB 500,000; if the circumstances

are serious, a fine of not less than RMB 500,000 but not more than RMB 1 million will be imposed; the illegal income, if any, will be confiscated. The persons directly in charge and other directly responsible persons will be subject to a fine of not less than RMB 5,000 but not more than RMB 20,000 in case of failure to:

- (1) The topsoil stripped during the development and construction process has not been collected and stored separately;
- (2) The risk management and control or remediation activities caused new contamination to the soil and surrounding environment;
- (3) In case of transport of the contaminated soil, the transport time, mode, route, the quantity of contaminated soil, destination and the final disposal measures have not been reported to the competent departments of ecological environment in the places where the soil is to be transported out and transported in;
- (4) The construction land that failed to meet the targets of risk management and control or remediation as set out in the soil contamination risk assessment report is used for projects unrelated to the risk management and control or remediation.

Article 92 Persons accountable for soil contamination or land-use rights holders that failed to conduct later-phase management in accordance with the provisions of this Law will be ordered to make corrections by the competent departments of ecological environment or other departments responsible for the supervision and management of soil contamination prevention and control and be subject to a fine of not less than RMB 10,000 but not more than RMB 50,000; if the circumstances are serious, a fine of not less than RMB 50,000 but not more than RMB 500,000 will be imposed.

Article 93 Entities that refuse to cooperate or practice frauds during inspection in violation of the provisions of this Law will be ordered to make corrections by the competent departments of ecological environment or other departments responsible for the supervision and management of soil contamination prevention and control, and be subject to a fine of not less than RMB 20,000 but not more than RMB 200,000; The persons directly in charge and other directly responsible persons will be subject to a fine of not less than RMB 5,000 but not more than RMB 20,000.

Article 94 Persons accountable for soil contamination or land-use rights holders that conduct any of the following activities will be ordered to make corrections by the competent departments of ecological environment under the local governments or other departments responsible for the supervision and management of soil contamination prevention and control and be subject to a fine not less than RMB 20,000 but not more than RMB 200,000; those who refuse to make corrections will be subject to a fine of not less than RMB 200,000 but not more than RMB1 million; if

the corrections are commissioned to other parties, the expenses incurred shall be borne by the persons accountable for soil contamination or the land-use rights holders. The persons directly in charge and other directly responsible persons will be subject to a fine of not less than RMB 5,000 but not more than RMB 20,000 in case of failure to:

- (1) conduct a soil contamination survey in accordance with the provisions;
- (2) conduct a soil contamination risk assessment in accordance with the provisions;
- (3) take risk management and control measures in accordance with the provisions;
 - (4) conduct remediation in accordance with the provisions;
- (5) commission relevant agencies to assess the effect of risk management and control or remediation following the completion of the risk management and control or remediation activities separately.

If the persons accountable for soil contamination or land-use rights holders fall into any circumstance described in item 3 or 4 above and the consequences are serious, the competent departments of ecological environment under the local governments or other departments responsible for the supervision and management of soil contamination prevention and control may transfer the case to the public security organ, and detain the persons directly in charge and other responsible for more than 5 days but not less than 15 days.

Article 95 Entities that conduct any of the following activities in violation of the provisions of this Law will be ordered by relevant department under the local governments to make corrections; those who refuse to make corrections will be subject to a fine of not less than RMB10,000 but not more than RMB 50,000:

- (1) The entities under the key supervision for soil contamination failed to submit the soil contamination prevention and control plan in accordance with the provisions to the competent departments of ecological environment, industry and information technology under the local governments for the record;
- (2) The persons accountable for soil contamination or the land-use rights holders failed to submit the remediation plan or the remediation effect assessment report in accordance with the provisions to the competent departments of ecological environment, agriculture and rural affairs, forestry and grassland under the local governments for the record;

(3) The land-use rights holders failed to submit the soil contamination survey report to the competent departments of ecological environment under the local governments for the record.

Article 96 If any personal or property damage is caused to others, the persons accountable for soil contamination shall bear the tort liability in accordance with law.

If the persons accountable for soil contamination are unidentifiable, the land-use rights holders that failed to perform the soil contamination risk management and control or remediation obligation in accordance with the provisions of this Law, and thus causing personal or property damage to others shall bear the tort liability in accordance with law.

In case of civil disputes caused by soil contamination, the parties may apply to the competent departments of ecological environment under the local governments for mediation, or bring a lawsuit before the people's court.

Article 97 If the contaminated soil has damaged the national or the public interest, the relevant institutions and organizations may bring a lawsuit before the people's court in accordance with the *Environmental Protection Law of the People's Republic of China*, the *Civil Procedural Law of the People's Republic of China*, the *Administrative Procedural Law of the People's Republic of China* and other laws.

Article 98 If any violation of the provisions of this Law constitutes a violation of the public security management rules, the violator shall be punished by the public security organ in accordance with law; if a crime is constituted, the violator shall be held legally liable for criminal liabilities.

Chapter VII Supplementary Provisions

Article 99 This Law shall come into force as of January 1, 2019.