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Short review / Краткий обзор

Questions of accumulated environmental harm -People's Republic of China

Xuecong Zhang, Vladimir E. Pinaev□

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RUDN University, Moscow, Russian Federation ⊠pinaev-ve@rudn.ru

Abstract. The research is dedicated to the state of legislation in the People's Republic of China on accumulated environmental harm and existing practices of liquidating objects of accumulated environmental harm. This research contains an up-to-date list of regulatory legal documents of the People's Republic of China on the topic. The research also presents some aspects of Chinese scientists' research on environmental impact and accumulated environmental harm.

Keywords: accumulated environmental harm, legislation of the People's Republic of China on accumulated environmental harm, modern environmental impact studies in China

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INDUSTRIAL ECOLOGY

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Вопросы накопленного экологического вреда – практика Китайской Народной Республики

С. Чжан, В.Е. Пинаев №

Российский университет дружбы народов, Москва, Российская Федерация ⊠pinaev-ve@rudn.ru

Аннотация. Исследование посвящено состоянию законодательства в Китайской Народной Республике по вопросам накопленного вреда окружающей среде и существующим практикам ликвидации объектов накопленного вреда окружающей среде. Представлен актуальный перечень нормативно-правовых документов КНР по исследуемому вопросу. Также раскрываются некоторые аспекты исследований китайских ученых по вопросам воздействия на окружающую среду и накопленного экологического вреда.

Ключевые слова: накопленный вред окружающей среде, законодательство Китайской Народной Республики по вопросу накопленного вреда окружающей среде, современные исследования воздействия на окружающую среду в Китае

Вклад авторов: все авторы сделали эквивалентный вклад в подготовку публикации.

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In People's Republic of China (China), the problem of environmental harm caused by economic development and increased consumption is becoming more and more obvious. In the works of Chinese scientists, attention is paid to various aspects of harm caused to the environment. Including aspects of the impact on water resources [1], the impact of pollutants, even on regions located at a considerable distance from the source of the impact [2], the objects of accumulated environmental harm and methods of reclamation are typified [3], including quarries left after the extraction of minerals by the open pit method [4], reclamation of mines [5]. Studies are being conducted concerning the state of water bodies [6], the increase in the area of urban areas and their impact on the environment [7]. Studies and comparative analysis in dynamics are conducted for various provinces of China, for example, Guangdong [8].

In China the issue of accumulated environmental damage is actual as in other countries. According to some reports, there is currently no official publicly available register of objects of accumulated environmental harm in China, at the same time regulatory documents on accumulated environmental harm are being actively issued, for example:

- 1) "Technical Guideline on Construction and Operation of Heavy Metal Contaminated Soil Landfill" DB11/T 810-2011¹;
- 2) "Technical Guideline for Contaminated Sites Remediation Validation" DB11/T 783-2011²;
- 3) "Screening Levels for Soil Environmental Risk Assessment of Sites" DB11/T 811-2011³;
- 4) "Technical guidelines for Monitoring During Risk Control and Remediation of Soil Contamination of Land for Construction" HJ 25.2-2019⁴;
- 5) "Technical Guidelines for soil Remediation of Land for Construction" HJ 25.4-2019 ⁵;
- 6) "Technical Specifications for Emergency Monitoring in Environmental Accidents" HJ 589-2021⁶.

It is also important to note that even with knowledge of the Chinese language, it may be difficult to find the original document – it is more likely to find an official copy on non-governmental resources.

Important to note, that in the title of documents, "HJ" stand for "environment", it means this document is the environment document for every place in China. "DB" stand for "Local Standard", it means this fill is only work for a certin place in China. Documents 1, 2, 3 are all standards only work for Beijing, documents 4, 5, 6 is work for every where in China.

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[&]quot;Technical Guideline on Construction and Operation of Heavy Metal Contaminated Soil Landfill" – DB11/T 810-2011. Available from: https://max.book118.com/html/2022/0909/7033066023004163.shtm (accessed: 01.01.2023). Link to the page about putting the document into effect: http://scigj.beijing.gov.cn/bsfw/bmfw/bzhzl/dfbz/dfbzgg/201909/t20190904 259186.html

² "Technical Guideline for Contaminated Sites Remediation Validation" – DB11/T 783-2011. Available from: https://max.book118.com/html/2018/1116/6022001115001231.shtm (accessed: 01.01.2023). Link to the page about putting the document into effect: http://scjgj.beijing.gov.cn/bsfw/bmfw/bzhzl/dfbz/dfbzgg/201909/t20190904_259211.html

³ "Screening Levels for Soil Environmental Risk Assessment of Sites" – DB11/T 811-2011. Available from: https://max.book118.com/html/2021/1103/7004052051004034.shtm (accessed: 01.01.2023). Link to the page about putting the document into effect: http://scjgj.beijing.gov.cn/bsfw/bmfw/bzhzl/201909/t20190926_413753.html

⁴ "Technical guidelines for monitoring during risk control and remediation of soil contamination of land for construction" – HJ 25.2-2019. Available from: https://www.mee.gov.cn/ywgz/fgbz/bzwb/trhj/201912/W020191224561614977338.pdf (accessed: 01.01.2023). Link to the page about putting the document into effect: https://www.mee.gov.cn/ywgz/fgbz/bz/bzwb/trhj/201912/t20191224_749891.shtml

⁵ "Technical guidelines for soil remediation of land for construction" – HJ 25.4-2019. Available from: https://www.mee.gov.cn/ywgz/fgbz/bzwb/trhj/201912/W0201912245600 72891181.pdf (accessed: 01.01.2023). Link to the page about putting the document into effect: https://www.mee.gov.cn/ywgz/fgbz/bzwb/trhj/201912/t20191224_749895.shtml

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It can be concluded that the system of elimination of objects of accumulated environmental damage in China is similar to the existing one in the Russian Federation and is also on the way to eliminate objects of accumulated environmental damage, for example in Gongzhou [9].

It is also important to understand that the proposed translations of documents are not always correct and relevant. It is important to involve local specialists for translation, for example, when conducting environmental audits at enterprises in China with the involvement of foreign consultants.

It should also be noted that in some works of Russian authors, for example [10], incorrect details of Chinese documents and names are indicated. It is also important to remember that documents in China are periodically updated, as in Russia [11] and other countries.

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Bio notes:

Xuecong Zhang, Master's student of Institute of Environmental Engineering, RUDN University, 6 Miklukho-Maklaya St, Moscow, 117198, Russian Federation. E-mail: 1032224490@rudn.ru

Vladimir E. Pinaev, Cand. Sc. Econ., Docent, Department of Environmental Security and Product Quality Management, Institute of Environmental Engineering, RUDN University, 6 Miklukho-Maklaya St, Moscow, 117198, Russian Federation. ORCID: 0000-0001-8943-5462. E-mail: pinaev-ve@rudn.ru