China Reforms its Pollutant Discharge Permit (PDP) System

*Yue Huang**

On November 5, 2018, the Chinese Ministry of Ecology and Environment (MEE) issued the draft of the Regulations on Pollution Discharge Licensing (PDLR) to solicit public comments. It marked a new step towards the goal of establishing a permit-center regulatory system covering all kinds of regulated pollutant discharge.¹ This report will summarise the recent developments in Chinese pollutant permit regulation, introduce the new norms, institutions and comment on its characteristics. It concludes by highlighting the challenges brought by the reform and providing suggestions to affected enterprises.

I. Document No. 48: China's Pollutant Discharging Permit (PDP) Regulation

China's effort to establish a permit system for pollutant discharge can be traced back to the late 1980s. In 1988, the State Environmental Protection Administration (SEPA) issued the first permit regulation, compelling sewage dischargers to obtain permits.² In 1989, the SEPA also issued permit of air pollution in 23 cities.³ These experiments were however suspended in the 1990s until the middle 2010s. During this period, the control of pollutants was realised by punishing dischargers who violated regulations over concentration requirement. No mechanism was specially designed to control the quantity of discharge for particular individual enterprises.

After experiencing severe air and water pollution during its dramatic economic expansion, China decided to resume the PDP program. On September 11, 2015, the Central Party Committee announced an agenda for establishing 'a unified and fair permit system covering all fixed pollution sources in nation'. Under this scheme, pollutants must obtain permits as the basis for discharging.⁴

On November 10, 2016, the State Council published the Implementation Plan of the Permit System for Controlling Pollutant Discharge (Document No. 81). By defining PDP as the 'key for managing system fixed pollution sources', Document No. 81 marked the first step towards establishing PDP. Only one and a half months after issuing Document No.81, the MEP

released the Interim Provisions for the Administration of Discharge Permits (Document No. 186) which unified the emission permits of water and air pollutant. By the end of 2017, Document No. 186 was replaced by the Measures for the Administration of Discharge Permits (Trial) (Document No. 48), which further detailed the requirements for permit application, constituting the backbone of the current permit system.

Document No. 48 established several key principle for permits. First, it stipulated a 'one permit only' principle. According to this, the discharging permit is not only an approval for enterprises to discharge pollutants, but also a list of conditions that an enterprise must follow (Section II, Article 12-22. The text of the permit consists of two parts: the main and affiliated parts. The main part records the basic enterprise information, and the affiliated part is a bundle of documents relating to regulatory and operational information.

Document No. 48 also established a permit-centered, self-enforcing mechanism. When issuing a permit, environmental agencies also enlist several self-monitoring duties requiring enterprises to follow in operation. Permit issuers will regularly inspect enforcement of these duties.

The main duties include the following:

- Issuing a commitment letter: Discharging enterprises are required to submit a commitment letter when applying for a permit (Article 20).

DOI: 10.21552/icrl/2019/4/7

* Yue Huang is Assistant Professor of Environmental Law at Guangzhou University, China. He obtained his Ph.D from The University of Hong Kong and is a J.S.D candidate of Yale Law School. Dr. Huang has been a visiting scholar to Academia Sinica at Taipei. He also advises governmental agencies, courts, industries and NGOs in both China and the United States. For Correspondence: <yue.huang@yale.edu>

1 The Guidance on Further Promoting the Pilot Work of Paid Use and Trading of Emission Rights (2014).

2 Interim Measures for the Management of Water Pollutant Discharge Permit (1988).

3 Work Program for Pilot Program of Air Pollutant Discharge Permit System (1989).

4 General Plan for the Reform of Ecological Civilization System, Approved by the Political Bureau of the Central Committee on September 11, 2015.

- Establishing a self monitoring system: The permit requires enterprises to establish several internal self-monitoring mechanisms.
- Maintaining environmental account records: The regulation requires enterprises to record detailed discharge information in a special account. This record is used as a basis to evaluate the enforcement of the permit.
- Execution report: Under Document No. 48, enterprises must also issue execution reports periodically to environmental agencies. The content and frequency of such reports are stipulated in the pollutant discharge permit. The enterprises may be required to submit a report annually, quarterly or monthly.

Finally, Document No. 48 demands heavy duties of disclosure. Enterprises should proactively disclose the information relating to pollutant discharges. All reports issued by enterprises should be posted on a government-run website for public inspection. This informational platform, the State Pollutant Discharge Management Information Platform has been fully established now and anyone can easily access the information of issued discharging permit.⁵

II. Changes May Be Brought by PDLR

On the Basis of Document No. 48, the proposed PDLR attempted to establish a comprehensive system of a similar content as American Clear Air Act. While it basically follows the content of Document No. 48, it brings with it several changes on concrete measures of permit issuing.

1. Three Permitting Types

The PDLR includes three types of permit-issuing. They are permitting procedures for 'key substances', simplified permitting procedures and records. The 'key substance' procedures fall into three categories: Those for companies that discharge significant quantities of pollutants that are environmentally hazardous; those that submit relatively few pollutants

that are represent little danger to the environment and those whose emittance was virtually zero.

2. PDLR and the Control of the Local Issuer

PDLR stipulates that more stringent permitting conditions where the local environment fails to meet the national standard (Article 5). It is a change from the previous regulation which allowed local governments to change the issuing authority of and centralizes the issuing power to the government at the municipal-level (Article 7). The municipal government also centralized most of authorities of punishment (Chapter 6). Under PDLR, the only avenue left for county-level government to exercise power is punishing violators (Article 70, 71).

3. PDLR and the Imposition of More Rigorous Punishments

PDLR also integrates delegate's punishment and permit issuing powers to environmental agencies. It also dictates that holding a pollutant discharge permit does not automatically exempted enterprises from other legal liabilities (Article 80). Before issuing a pollutant discharge permit, environmental agencies must first punish any violations found during the review of the application (Article 81). Besides traditional punishments, enterprises violating the permit and relevant laws will be also punished through the 'social credit system', which may restrict enterprises ability to do business (Article 48). PDLR also authorises environmental agencies to punish the 'third parties who have provided technical services (Article 82).

III. Impact of Permit Reform to Pollutant Discharging Trading

PDLR has influenced the emerging Chinese pollutant discharge trading market (PDT). Until 2019, 28 provinces have carried out pilot projects, including 12 central government designated pilot provinces and 16 other provinces which voluntarily joined the program. The Chinese central government, although

⁵ Available at <<http://permit.mee.gov.cn/permitExt/defaults/default-index!getInformation.action>> accessed 19 December 2019.

The Contents of Discharging Permit

Main Part	Main production facilities; Main products and production capacity; Main raw and auxiliary materials; Pollution prevention and control facilities.
Affiliated Part-Regulatory Information	Environmental impact assessment; Key pollutant emission control indicators; transferable discharging rights and transaction records; Permissible concentration and permissible amount of discharge; Post-issuance environmental requirement.
Affiliated Part-Operational Information	The location and quantity of the discharge outlet; The way and direction of pollutant discharge, The Location and quantity of atmospheric pollutant unorganized emission sources. (Article 14, 15)

it did not entail the trading standards and categories, conferred wide discretion to the local governments to determine what industry and pollutants would join the PDT.

The PDT program currently only covers four pollutants sulfur dioxide, nitrogen oxides, chemical oxygen demand (COD) and ammonia nitrogen. Provinces are allowed to add other pollutants of high local impact, such as smoke and dust, heavy metals and Volatile organic pollutants (VOCs).⁶ It is also at the discretion of provincial governments to determine the scope of participating industries. In most pilot areas, thermal power, steel, cement, paper making, printing and dyeing industries were compelled to join the PDT program. In some provinces, such as Zhejiang and Chongqing, the whole industry system was covered by the PDT.

The current PDT has several obvious shortcomings. First, to avoid high environmental cost, enterprises tend to transfer their capacity to regions of low enforcement intensity. Which has further discouraged the local government to faithfully enforce pollutant control law. By 2018, due to the differences in law enforcement, the interprovincial differences of discharging rights have been enlarged by a factor of 10. Secondly, the market provided very few financial instruments available to the PDT. The mortgage of emission rights was the most frequently used financial instrument, but it relies heavily on local governments' guarantee of the transferability of the emission rights on local market and relative stability of the emission price. In other words, the government could withdraw such rights or refuse to purchase the rights any time after issuing these rights.

Document No. 48 and PDLR eliminated such fragmentation by eliminating the government intervention to quantity of quota on market. The 'one permit system' structured the permit as a quasi-property right, even if it was not recognised by Property Law.⁷ Since the discharging permit is the only proof of discharging right, local governments are no longer able to grant extra discharging rights beyond issued permits - the amount of discharging right on market could be predicted by the local 'discharging cap'. It reduces the price instability caused by intentional reservation or over-issuing and thus offers pollutant discharging rights higher value and fluidity.

IV. The Impact of Permits on Other Regulations

Document No. 48 and PDLR also influenced the execution of some key environmental laws.

1. Replacing Local Cap with a Company Cap

The old pollutant cap management system (on air and water) was a hierarchy-based system. The provin-

⁶ Some areas have expanded according to local actual pollution characteristics, such as smoke and dust in Shanxi and Lanzhou, Gansu, heavy metals in Hunan Province and volatile organic pollutants (VOCs) in Shunde District of Guangdong Province because of their outstanding ozone pollution.

⁷ MEE, Response to the Pilot Proposal for Deepening Emission Trading (2018).

The Contents of Main Self-enforcement Duties

Commitment Letter	The application materials for pollutant discharge permit are complete, true and lawful; Discharge pollutants according to the pollutant discharge permit; Implement the environmental management requirements stipulated in the pollutant discharge permit; The old facilities which cannot reach the demanded standards instantly are allowed to obtain conditional permit basing on the enterprises' commitment of reaching standards within promised period.
Self-monitoring System	Installing self-monitoring equipment and making regular everyday inspection to the pollutant discharge; In applying permit, enterprises must compile and submit own monitoring plans in accordance with the Technical Guide for Self-monitoring issued by MEE. (Article 11, 19) The self-monitoring duties, including concrete self-inspection requirements, monitoring contents, methods, locations, quality control and data recording were required to be recorded on the permit. (Article 18, 19)
Environmental Account	The situation of operation of major <i>production</i> facilities related to pollutant discharge. If any abnormal conditions occur, the reasons and counter measures; The situation of operation of <i>pollution prevention</i> facilities; if abnormal circumstances occur, the reasons and counter measures; The concentration and amount of discharge; if the discharge exceeds controlling standard, the reasons and counter measures; Other information that should be recorded in accordance with relevant technical specifications. The period of keeping account records is not less than three years. (Article 35)
Execution Report	Situations of: The actual emission concentration, quantity of pollutants and the analysis of meeting the standards based on the self-monitoring result. Explanations of abnormal situations of discharge or prevention facilities. The annual performance report should further add to monthly and quarterly report following information: Basic production information of sewage discharge units; Operation of pollution prevention facilities Self-monitoring the implementation; Implementation of environmental management account records; Information disclosure; The construction and operation of the internal environmental management system in the sewage discharge units; Implementation of other pollutant discharge permits. (Article 37) The actual emission concentration, quantity of pollutants and the analysis of meeting the standards based on the self-monitoring result. Explanations of abnormal situations of discharge or prevention facilities. The annual performance report should further add to monthly and quarterly report following information: Basic production information of sewage discharge units; Operation of pollution prevention facilities Self-monitoring the implementation; Implementation of environmental management account records; Information disclosure; The construction and operation of the internal environmental management system in the sewage discharge units; Implementation of other pollutant discharge permits. (Article 37)

cial government held a responsibility to keep discharging below the cap and further allocated discharging control duties to lower-level government. To maximize the utilization of the cap, local govern-

ment would reserve consideration pollutant quota and allocate them to favored enterprises. Document No. 48 and PDLR replaced the 'local cap' with an 'enterprise cap'. It means the favored enterprise would

no longer be able to receive an expanded quota beyond the permit from government.

2. Connecting with Environmental Impact Assessments (EIA)

Document No. 48 and PDLR both demand an EIA report in permit application. And these reports will be used as a basis for drafting permits. The EIA procedure will also influence the permit application procedure. To pass an EIA, most enterprises who discharge a low level of pollutants may simply fill an assessment form, while the enterprises with a greater environmental impact must conduct extensive assessment processes. Respectively, under PDLR, an enterprise which passes the EIA by just filling a form would obtain a permit through a simplified procedure or recording information. An enterprises required to pass a formal assessment is subjected to an application process for 'key management'. Besides, the implementation of permits will be used afterwards as a basis for post-construction environmental impact assessments. The result of such 'post-EIA' will affect the approval of a renovation project and governmental acceptance of a public project.

efit from the PDT market, enterprises should carefully design the agenda of discharging-cutting innovation to obtain tradable quotas.

Thirdly, enterprises must establish permit-required institutions and inner control procedures to create a regulatory 'safe harbor'. When, for instance, the data recorded for self-monitoring is found to be inaccurate, the enterprise will be should be in a good position to defend a against a government claim of fraud.

V. Conclusions

The recent reform of PDLR and related legislation fundamentally alters the way the discharge of pollutants is regulated in China. Discharge permits replace the traditional approach based on monetary fines. It not only *de facto* put cap on every discharger, but also confines the capacity of local governments to manipulate the discharging system. All these impose higher regulatory costs to impacted enterprises.

Enterprises must try best to obtain a permit satisfying their real levels of discharge. Some enterprises may hope to buy discharging quota from local governments or secondary markets. These transactions will now be harder to realise after the reform because of the more restrictive quota allocation. Also, in practice, it is highly unlikely for companies to obtain higher discharging quota when renewing permits. In that case, the initial permit will largely determine the production capacity of companies in the next years.

Secondly, under PDLR only the quota saved by technical-related emission-cutting is tradable. To ben-