A picture containing cluttered, shop

Description automatically generated





Guide to Vietnamese Environmental Law for the Garment Industry

*June 2021 – Final Draft*

This version covers all applicable regulations in place as of January 2021.

**An initiative of: In partnership with:**

![A picture containing shape

Description automatically generated]()Logo, company name

Description automatically generatedLogo, company name

Description automatically generated

![A picture containing shape

Description automatically generated]()

© **International Finance Corporation 2021. All rights reserved.**

2121 Pennsylvania Avenue, N.W.

Washington, D.C. 20433 Internet: www.ifc.org

*The material in this work is copyrighted. Copying and/or transmitting portions or all of this work without permission may be a violation of applicable law. IFC encourages dissemination of its work and will normally grant permission to reproduce portions of the work promptly, and when the reproduction is for educational and non-commercial purposes, without a fee, subject to such attributions and notices as we may reasonably require.*

*IFC does not guarantee the accuracy, reliability or completeness of the content included in this work, or for the conclusions or judgments described herein, and accepts no responsibility or liability for any omissions or errors (including, without limitation, typographical errors and technical errors) in the content whatsoever or for reliance thereon. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries. The findings, interpretations, and conclusions expressed in this volume do not necessarily reflect the views of the Executive Directors of The World Bank or the governments they represent.*

*The contents of this work are intended for general informational purposes only and are not intended to constitute legal, securities, or investment advice, an opinion regarding the appropriateness of any investment, or a solicitation of any type. IFC or its affiliates may have an investment in, provide other advice or services to, or otherwise have a financial interest in, certain of the companies and parties (including named herein.*

*All other queries on rights and licenses, including subsidiary rights, should be addressed to IFC’s Corporate Relations Department, 2121 Pennsylvania Avenue, N.W., Washington, D.C. 20433.*

*International Finance Corporation is an international organization established by Articles of Agreement among its member countries, and a member of the World Bank Group. All names, logos and trademarks are the property of IFC and you may not use any of such materials for any purpose without the express written consent of IFC. Additionally, “International Finance Corporation” and “IFC” are registered trademarks of IFC and are protected under international law.*

**About IFC:**

IFC, a member of the World Bank Group, is the largest global development institution focused on the private sector in emerging markets. Working with more than 2,000 businesses worldwide, we use our capital, expertise, and influence to create markets and opportunities in the toughest areas of the world. In FY20, we delivered a record $22 billion in long-term financing for developing countries, leveraging the power of the private sector to help end poverty and boost shared prosperity.

For more information, visit www.ifc.org

**About Better Work:**

Better Work – a collaboration between the United Nation’s [International Labour Organization (ILO)](http://www.ilo.org/global/lang--en/index.htm) and the [International Finance Corporation (IFC)](http://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/home) – is a comprehensive programme bringing together all levels of the garment industry to improve working conditions and respect of labour rights for workers, and boost the competitiveness of apparel businesses. Currently, the programme is active in 1,700 factories employing more than 2.4 million workers in nine countries.  As well as advising factories, Better Work collaborates with governments to improve labour laws, and with brands to ensure progress is sustained. We also advise unions on how to give workers a greater say in their lives, and work with donors to help achieve their broader development goals. Our vision is a global garment industry that lifts millions of people out of poverty by providing decent work, empowering women, driving business competitiveness and promoting inclusive economic growth.

For more information, visit www.betterwork.org

ABOUT THIS GUIDE

This “Guide to Vietnamese Environmental Law for the Garment Industry” (hereinafter referred to as “the guide”) has been developed to be a one-stop reference on national environmental regulations for garment factories in Vietnam. The guide is part of a training and advisory project implemented by the International Finance Corporation (IFC) to help garment factories in Vietnam to be equipped to meet applicable national environmental regulatory requirements.

The project was designed and delivered in close collaboration with Better Work Vietnam and started in 2017-2018 with 30 Better Work factories in Vietnam. The preparation of the project has also been informed by consultations with global apparel brands, factories and the Sustainable Apparel Coalition. The project included the delivery of a two-day training session followed by in-factory advisory sessions to the participating factories. In addition, a first version of the guide and a self-assessment tool were developed. This first phase was funded by the South Korean Ministry of Economy and Finance.

The second phase of the project included a 4-day training to 55 Better Work factories in Vietnam in April 2021. The guide and the self-assessment tool were updated to incorporate new applicable regulations and reflect the latest revisions to existing ones. This second phase was funded by the European Union.

The guide covers all environmental laws, decisions, decrees, and circulars published by several government agencies that are required from the garment sector. The information is compiled to help factories better understand the content of the regulations and the processes necessary in the collection and use of data to show fulfillment with the environmental legal requirements.

**This version of the guide includes all applicable regulations in place as of January 2021.**

The guide covers the following topics:

1. General environmental regulations
2. Pre-operation permits and assessments
3. Environmental dossier and permits
4. Water extraction and consumption
5. Wastewater management
6. Solid waste
7. Hazardous waste
8. Air emissions
9. Noise and vibration
10. Energy management
11. Responses to climate change
12. Chemical handling and management

This list of topics has been designed to align with the categories of the Higg Facility Environmental Module (FEM). The Higg FEM is an apparel and footwear industry sustainability assessment tool, by the Sustainable Apparel Coalition, that standardizes how facilities measure and evaluate their environmental performance, year after year.

AKNOWLEDGMENTS

This “Guide to Vietnamese Environmental Law for the Garment Industry” has been developed by the International Finance Corporation (IFC) in partnership with the South Korean Ministry of Economy and the European Commission.

At IFC, the development of the guide was led by Maria Soledad Requejo, and the update of the latest edition was led by Diane Davoine and Raquel Scarpari. The guide also received support from Adriana Triana, and valuable insights from Irene Angeletti, and Huong Thien Nguyen.

IFC closely collaborated with ILO and Better Work Vietnam (BWV) throughout the design and implementation of the project. The delivery of the project would not have been possible without the support and collaboration of Nguyen Hong Ha, Doan Thuy Diep, Nguyen Duc Thien, Mach Nhu Tien, Nguyen Thi Phuong Thanh, among other BWV colleagues.

The research and writing underpinning the guide were conducted by ASSIST Asia, which has been commissioned by IFC to develop and update the guide, the self-assessment tool, and the training contents, and to deliver the training and advisory sessions to participating factories. ASSIST’s team was composed of Aru David, Tran To Ngan, Nguyen Thi Truyen, Tring Ngoc Hoang Thuy, Lam Boi Di.

For further information on program contributors, please see:

IFC: <https://ifc.org/>

Better Work: <https://betterwork.org/>

ASSIST Asia: <https://assistasia.org>

Developed by:Logo, company name

Description automatically generated



Logo, company name

Description automatically generatedIn partnership with

![A picture containing shape

Description automatically generated]()

![A picture containing shape

Description automatically generated]()

TABLE OF CONTENTS

[ABBREVIATIONS 9](#_Toc75361598)

[TERMINOLOGY AND DEFINITIONS 10](#_Toc75361599)

[LIST OF REFERENCE LAWS 12](#_Toc75361600)

[1. THE 2015 LAW ON ENVIRONMENTAL PROTECTION 13](#_Toc75361601)

[1.1. COMPETENT AUTHORITIES 13](#_Toc75361602)

[1.2. GENERAL PROVISIONS ON ENVIRONMENTAL PROTECTION 15](#_Toc75361603)

[1.3. PROHIBITED ACTS 16](#_Toc75361604)

[1.4. RESOLUTION OF ENVIRONMENTAL VIOLATIONS 16](#_Toc75361605)

[1.5. ENVIRONMENTAL DISPUTES, COMPLAINTS, ACCUSATIONS AND LAWSUITS 18](#_Toc75361606)

[2. PRE-OPERATION PERMITS AND ASSESSMENTS 19](#_Toc75361607)

[2.1. ENVIRONMENTAL IMPACT ASSESSMENT REPORT 19](#_Toc75361608)

[2.2. ENVIRONMENTAL PROTECTION PLANS 23](#_Toc75361609)

[2.3. OTHER CASES 25](#_Toc75361610)

[3. THE ENVIRONMENTAL DOSSIER AND PERMITS 26](#_Toc75361611)

[3.1. INTERPRETATION OF TERMS 26](#_Toc75361612)

[3.2. ESTABLISHMENT OF THE ENVIRONMENTAL DOSSIER BY PROJECT PHASE 26](#_Toc75361613)

[3.3. THE ENVIRONMENTAL REGULATORY DOSSIER 27](#_Toc75361614)

[3.4. Implementing the Environmental Protection Plan in operational phase 28](#_Toc75361615)

[4. WATER EXTRACTION AND CONSUMPTION 29](#_Toc75361616)

[4.1. GENERAL PRINCIPLES 29](#_Toc75361617)

[4.2. CONSULTATION WITH COMMUNITIES, ORGANIZATIONS AND INDIVIDUALS 29](#_Toc75361618)

[4.3. PROHIBITED ACTS 29](#_Toc75361619)

[4.4. PROTECTION OF WATER RESOURCES 29](#_Toc75361620)

[4.5. WATER CONSERVATION 30](#_Toc75361621)

[4.6. ENVIRONMENTAL PROTECTION OF GROUNDWATER 30](#_Toc75361622)

[4.7. PERMITS FOR WATER RESOURCES 31](#_Toc75361623)

[4.8. REGISTER, LICENSE OF EXPLOITATION, USE OF WATER 35](#_Toc75361624)

[4.9. CHARGE FOR GRANTING WATER EXPLOITATION RIGHT 37](#_Toc75361625)

[4.10. HANDLING ADMINISTRATIVE VIOLATIONS AGAINST WATER RESOURCES 37](#_Toc75361626)

[5. WASTEWATER MANAGEMENT 38](#_Toc75361627)

[5.1. INTERPRETATION OF TERMS 38](#_Toc75361628)

[5.2. GENERAL PRINCIPLES OF WASTEWATER MANAGEMENT 38](#_Toc75361629)

[5.3. PROHIBITED ACTS 39](#_Toc75361630)

[5.4. WASTEWATER TREATMENT SYSTEM 39](#_Toc75361631)

[5.5. COLLECTION AND TREATMENT OF WASTEWATER 39](#_Toc75361632)

[5.6. WASTEWATER CONNECTION AGREEMENT 40](#_Toc75361633)

[5.7. DISCHARGE OF WASTEWATER INTO WATER SOURCES 40](#_Toc75361634)

[5.8. WASTEWATER MANAGEMENT 40](#_Toc75361635)

[5.9. RIGHTS AND OBLIGATIONS FOR DISCHARGING WASTEWATER INTO WATER SOURCES 41](#_Toc75361636)

[5.10. WASTEWATER DISCHARGE PERMITS 43](#_Toc75361637)

[5.11. REQUIREMENTS FOR TRANSFERING OF NON-HAZARDOUS WASTEWATER 44](#_Toc75361638)

[5.12. MONITORING OF WASTEWATER DISCHARGE 45](#_Toc75361639)

[5.13. AUTOMATIC MONITORING OF WASTEWATER 45](#_Toc75361640)

[5.14. COLECTING AND REPORTING INFORMATION OBTAINED THROUGH MONITORING PROCESS 46](#_Toc75361641)

[5.15. NATIONAL TECHNICAL REGULATIONS 46](#_Toc75361642)

[5.16. MANAGEMENT TREATED WASTEWATER 46](#_Toc75361643)

[5.17. ENVIRONMENTAL PROTECTION FEE ON WASTEWATER 46](#_Toc75361644)

[6. SOLID WASTE 49](#_Toc75361645)

[6.1. INTERPRETATON OF TERMS 49](#_Toc75361646)

[6.2. HOUSEHOLD SOLID WASTE 49](#_Toc75361647)

[6.3. ORDINARY INDUSTRIAL SOLID WASTE 50](#_Toc75361648)

[6.4. MANAGEMENT OF SLUDGE 51](#_Toc75361649)

[7. HAZARDOUS WASTE 53](#_Toc75361650)

[7.1. INTERPRETATION OF TERMS 53](#_Toc75361651)

[7.2. RESPONSIBILITIES OF HAZARDOUS WASTE OWNER 53](#_Toc75361652)

[7.3. REGISTRATION OF HAZARDOUS WASTE SOURCES OWNERS 54](#_Toc75361653)

[7.4. CLASSIFICATION, COLLECTION, AND STORAGE HAZARDOUS WASTE 55](#_Toc75361654)

[7.5. TECHNICAL REQUIREMENTS AND PROCEDURES FOR HAZARDOUS WASTE 56](#_Toc75361655)

[7.6. NATIONAL TECHNICAL REGULATIONS 57](#_Toc75361656)

[8. AIR EMISSIONS 58](#_Toc75361657)

[8.1. INTERPRETATION OF TERMS 58](#_Toc75361658)

[8.2. MANAGEMENT OF AIR EMISSIONS 58](#_Toc75361659)

[8.3. CONTROL OF DUST AND EXHAUST GASES 58](#_Toc75361660)

[8.4. REGISTRATION AND LICENSING OF INDUSTRIAL GASES GENERATORS 59](#_Toc75361661)

[8.5. AUTOMATIC AND CONTINOUS MONITORING OF INDUSTRIAL AIR EMISSION 60](#_Toc75361662)

[8.6. NATIONAL TECHNICAL REGULATIONS ON DUST AND INDUSTRIAL AIR EMISSION 61](#_Toc75361663)

[9. NOISE AND VIBRATION 62](#_Toc75361664)

[9.1. MANAGEMENT AND CONTROL OF NOISE AND VIBRATION 62](#_Toc75361665)

[9.2. NATIONAL TECHNICAL REGULATIONS ON NOISE, VIBRATION 62](#_Toc75361666)

[10. ENERGY MANAGEMENT 63](#_Toc75361667)

[10.1. INTERPRETATION OF TERMS 63](#_Toc75361668)

[10.2. RESPONSIBILITIES 63](#_Toc75361669)

[10.3. MEASURES FOR ECONOMICAL AND EFFICIENT USE IN INDUSTRIES 63](#_Toc75361670)

[10.4. IDENTIFICATION OF MAJOR ENERGY USERS 65](#_Toc75361671)

[10.5. ENERGY MANAGEMENT MODEL 66](#_Toc75361672)

[10.6. RESPONSIBILITIES OF MAJOR ENERGY USERS 66](#_Toc75361673)

[10.7. PLANNING ON ECONOMICAL AND EFFICIENT USE OF ENERGY 67](#_Toc75361674)

[10.8. CONDITIONS AND TASKS FOR ENERGY MANAGERS OF MAJOR ENERGY USERS 67](#_Toc75361675)

[10.9. ENERGY AUDIT 67](#_Toc75361676)

[10.10. INSPECTION OF ECONOMICAL AND EFFICIENT USE OF ENERGY 68](#_Toc75361677)

[10.11. PROHIBITED ACTS 69](#_Toc75361678)

[10.12. SANCTION AGAINST ADMINISTRATIVE VIOLATION 69](#_Toc75361679)

[11. RESPONSES TO CLIMATE CHANGE 70](#_Toc75361680)

[11.1. INTERPRETATION OF TERMS 70](#_Toc75361681)

[11.2. RESPONSE TO CLIMATE CHANGE 70](#_Toc75361682)

[11.3. REDUCE GHG EMISSIONS 70](#_Toc75361683)

[12. CHEMICAL HANDLING AND MANAGEMENT 71](#_Toc75361684)

[12.1. INTERPRETATION OF TERMS 71](#_Toc75361685)

[12.2. GENERAL PROVISIONS 71](#_Toc75361686)

[12.3. RIGHTS AND OBLIGATIONS OF ORGANIZATIONS 72](#_Toc75361687)

[12.4. GENERAL REQUIREMENTS TO ENSURE CHEMICAL SAFETY 72](#_Toc75361688)

[12.5. CLASSIFICATION AND LABELING OF CHEMICALS 74](#_Toc75361689)

[12.6. CHEMICAL SAFETY DATA SHEETS (CHEMICAL SDS) 77](#_Toc75361690)

[12.7. DISPOSAL OF DISCARDED CHEMICALS 78](#_Toc75361691)

[12.8. PREVENTION, RESPONSE OF CHEMICAL INCIDENTS 78](#_Toc75361692)

[12.9. CHEMICAL INCIDENT PREVENTION AND RESPONSE PLANS (CIPRP) 79](#_Toc75361693)

[12.10. CHEMICAL INCIDENT PREVENTION AND RESPONSE MEASURES (CIPRM) 82](#_Toc75361694)

[12.11. SAFETY DISTANCES 84](#_Toc75361695)

[12.12. HAZARDOUS CHEMICAL, BANNED CHEMICAL, TOXIC CHEMICAL 85](#_Toc75361696)

[12.13. DECLARATION OF CHEMICALS 86](#_Toc75361697)

[12.14. SUPPLY OF INFORMATION ON CHEMICALS 88](#_Toc75361698)

[12.15. REGISTRATION OF NEW CHEMICALS 88](#_Toc75361699)

[12.16. TRAINING COURSES IN CHEMICAL SAFETY 88](#_Toc75361700)

[12.17. REPORTING 90](#_Toc75361701)

[12.18. PROHIBITED ACTS IN CHEMICAL-RELATED ACTIVITIES 91](#_Toc75361702)

[12.19. HANDLING OF VIOLATIONS 91](#_Toc75361703)

[13. GOVERNMENT INCENTIVES AND ASSISTANCE 92](#_Toc75361704)

[13.1. LIST OF ENVIRONMENTAL PROTECTION ACTIVIES RECEIVING INCENTIVES AND ASSISTANCE 92](#_Toc75361705)

[13.2. GOVERNMENT INCENTIVES AND ASSISTANCES FOR ENVIRONMENTAL PROTECTION 92](#_Toc75361706)

[13.3. POLICY INCENTIVES FOR ENERGY 93](#_Toc75361707)

[ANNEX – About this edition of the guide 95](#_Toc75361708)

# ABBREVIATIONS

|  |  |
| --- | --- |
| **Art.** | Article |
| **App.** | Appendix |
| **Cir.** | Circular |
| **Dec.** | Decree |
| **DONRE** | Department of Natural Resources and Environment |
| **EIA** | Environmental impact assessment |
| **Env** | Environmental |
| **EP** | Environment protection |
| **EPZ** | Export Processing Zone |
| **IC** | Industrial cluster |
| **IP** | Industrial park |
| **IZ** | Industrial Zone |
| **MONRE** | **Ministry of Natural Resources and Environment** |
| **PC** | People's Committee |

# TERMINOLOGY AND DEFINITIONS

This “Guide to Vietnamese Environmental Law for Garment Industry” uses the following terms and definitions:

|  |
| --- |
| 1. ***Economic zone*** means an area that has a separate economic space with a particularly favorable investment and business environment for investors, has specified geographical boundaries, and is established according to stipulated conditions, order and procedures. |
| 1. ***Environment components***refer to physical constituent elements forming an integral part of the environment such as land, water, air, sound, light, organism and things in other physical forms. |
| 1. ***Environment*** refers to a system of natural and artificial physical factors affecting the existence and development of human beings and creatures. |
| 1. ***Environmental contaminant***refers to chemicals, physical and biological substances that exceed the permitted benchmark in the environment, resulting in pollution. |
| 1. ***Environmental degradation***refers to a reduction in the quality and amount of environment components, which can pose a threat to human beings and living creatures. |
| 1. ***Environmental incidents*** refer to any unexpected event that happens as a result of human activities or environmental changes, which seriously contaminate, degrade or disturb the environment. |
| 1. ***Environmental information***refers to environmental figures and data represented in the form of signs, letters, numbers, images, sounds or correspondences. |
| 1. ***Environmental monitoring***refers to the systematic monitoring process on environmental components and factors for the purpose of providing necessary information on current status, happenings of the environment quality, and harmful impacts on the environment. |
| 1. ***Environmental pollution***refers to the changes in the components of the environment that breach technical regulations on environment and environmental standards, which can result in adverse impacts on human beings and living creatures. |
| 1. ***Environmental protection***refers to the conservation, prevention and control of harmful impacts on environment; the response to environmental emergencies; the remedy of pollution, degradation, improvement and restoration; sensible extraction and consumption of natural resources for the purpose of maintaining a pure environment. |
| 1. ***Environmental standards***refer to limits of parameters relating to the environmental quality in surrounding areas, the amount of contaminants that remain in wastes, technical and managerial requirements promulgated by competent authorities and organizations under the form of a written document to apply voluntarily for purpose of environmental protection. |
| 1. ***Export processing zone*** means an industrial area that specializes in producing export goods, providing services to produce export goods and export activities; has specified geographical boundaries, and is established according to conditions, order, and procedures applied to industrial parks. |
| 1. ***Friendly environmental facilities*** are those that meet the criteria of effectively using energy, water saving, reduction, re-use and re-cycling of waste. |
| 1. ***Industrial park***means a zone that specializes in the production of industrial goods or provision of services for industrial production, has specified geographical boundaries, and is established according to stipulated conditions, order and procedures. |
| 1. ***Pollution control***refers to the process for preventing, detecting, controlling and removing of pollutants or contaminants. |
| 1. ***Seriously polluting establishment*** means an establishment that discharges wastewater, exhaust gases, dust, solid wastes, noise, vibration, and other pollutants exceeding the technical regulations on the environment. |
| 1. ***Technical regulations on environment*** refer to limits of parameters relating to the environmental quality in surrounding areas, the amount of contaminants that remain in wastes, technical and managerial requirements issued by competent authorities under the form of writing to apply compulsorily for purpose of environmental protection. |
| 1. ***Waste classification*** identifies a waste by its properties, including hazardous properties, in order to divide into categories or groups of wastes which need to be dealt with in accordance with specific waste management procedures. |
| 1. ***Waste management***refers to the process of preventing, minimizing, monitoring, classifying, collecting, transporting, reusing, recycling and disposing wastes. |
| 1. ***Waste recycling*** is a process of using technological and technical solutions to recover valuable components from waste. |
| 1. ***Waste reuse*** means reuse of waste directly or after pre-processing which does not alter the nature of the waste. |
| 1. ***Waste treatment*** is a process of using technological and technical solutions, (different from pre-processing) to reduce, eliminate, isolate, burn, destroy, and burry waste and its harmful components. |
| 1. ***Wastes***refer to a kind of materials emitted from activities such as manufacturing, business, service, daily activities or others. |

# LIST OF REFERENCE LAWS

|  |  |  |
| --- | --- | --- |
| **Code** | **Name** | **Issued date** |
| 06/2007/QH12 | Law on Chemicals | 21/11/2007 |
| 50/2010/QH12 | Law on Economical and Efficient use of Energy | 17/06/2010 |
| 17/2012/QH13 | Law on Water resource | 02/07/2012 |
| 55/2014/QH13 | Law on Environmental Protection | 01/01/2015 |
| 21/2011/NĐ-CP | Detail Economical & Efficient use of energy law | 29/03/2011 |
| 134/2013/NĐ-CP | Regulations on sanction against administrative violation in the field of electricity, safety of hydroelectric dam, thrifty and effective use of energy | 17/10/2013 |
| 201/2013/NĐ-CP | Guide to implement water resource law | 27/11/2013 |
| 80/2014/NĐ-CP | Regulates the drainage and treatment of wastewater | 06/08/2014 |
| 18/2015/NĐ-CP | Prescribing environmental protection master plan, strategic environmental assessment, environmental impact assessment and environmental protection plan | 04/01/2015 |
| 19/2015/NĐ-CP | Guide to environmental protection law | 04/01/2015 |
| 38/2015/NĐ-CP | Management of waste and discarded materials | 24/04/2015 |
| 155/2016/NĐ-CP | On administrative measures against violations in the field of environment | 01/02/2017 |
| 113/2017/NĐ-CP | Guide to Chemicals law | 09/10/2017 |
| 40/2019/NĐ-CP | On amendments to Decrees on guidelines for the Law on Environment Protection. | 13/05/2019 |
| 71/2019/NĐ-CP | On administrative measures against violations in the field of chemicals and industrial explosive materials | 30/08/2019 |
| 36/2020/NĐ-CP | On administrative measures against violations in the field of water and mineral resources | 24/03/2020 |
| 53/2020/NĐ-CP | Environmental protection fee of wastewater. | 05/05/2020 |
| 25/2009/TT-BTNMT | On promulgation of the national regulation on environment minister of natural resources and environment | 16/11/2009 |
| 39/2010/TT-BTNMT | On promulgation of the national regulation on environment minister of natural resources and environment | 16/12/2010 |
| 41/2010/TT-BTNMT | On promulgation of the national regulation on emission of industrial waste incinerator | 28/12/2010 |
| 02/2014/TT-BCT | On solutions for economical and efficient use of energy in industries | 16/01/2014 |
| 27/2014/TT-BTNMT | Ground water exploitation and water resource registration | 30/05/2014 |
| 35/2015/TT-BTNMT | Environmental protection in economic zones, industrial parks, hi-tech parks. | 30/06/2015 |
| 36/2015/TT-BTNMT | Hazardous waste management | 30/06/2015 |
| 26/2016/TT-BYT | On promulgation of the national regulation microclimate | 30/06/2016 |
| 31/2016/TT-BTNMT | On environmental management in industrial parks, industrial complexes; trade villages; agencies, organizations, and businesses | 14/10/2016 |
| 32/2017/TT-BCT | Specifying and providing guidelines for implementation of certain articles of the law on chemicals and the government’s decree no. 113/2017/ND-CP | 28/12/2017 |
| 25/2019/TT-BTNMT | On amendments to Decree 40/2019/NĐ-CP; on guidelines for the Law on Environment Protection and regulate environmental monitoring activities management | 31/12/2019 |
| 36/2020/TT-BTC | Prescribing the collection and remittance rate of granting license for exploring, exploiting and using water resource; discharging wastewater in to the water source and performing groundwater exploitation by the state agencies and charge of exploiting and using hydro meteorological information and data | 05/05/2020 |
| 25/2020/TT-BCT | On preparing plans for economical and efficient use of energy and reports on implementation thereof; implementation of energy accounting | 29/09/2020 |

# THE 2015 LAW ON ENVIRONMENTAL PROTECTION

## COMPETENT AUTHORITIES

### State Management Hierarchy on Environmental Topics

Current hierarchy of state management on environment is as follows:

Ministry of Natural Resources and Environment

Other Ministries & Ministerial-level bodies

Fatherland Front Committees

Other organizations

Province

District PC\*

Commune PC\*

Division of Natural Resources and Environment

Cadre in charge of the environment

Government

Department of Natural Resources and Environment

Department of Natural Resources and Environment

\*PC – People’s Committees

### Responsibility of the State Management Authorities on Environmental Topics

#### (2015 Law on Environmental Protection, Art. 140, 141, 142, 143, 144, 145)

##### National Government

Responsible for state management on environmental protection throughout the country.

##### Minister of Natural Resources and Environment

Body of the national government that is accountable for state management on environmental protection.

##### Ministers and Heads of Ministerial-level Bodies

###### Lead and cooperate with the Minister of Natural Resources and Environment in the creation and promulgation of circulars and joint circulars on environmental protection in the areas managed by the respective ministries and departments; and

###### Carry out the duties as stipulated in the Law on Environmental Protection and coordinate with the Minister of Natural Resources and Environment the implementation of the law within their own management.

##### The People’s Committees (PCs)

###### The provincial PCs have the following responsibilities:

1. promulgate legal documents, policies, programs and plans on environmental protection by delegated authority;
2. organize the implementation of laws, strategies, programs, plans and duties on environmental protection;
3. manage environmental monitoring systems in their locality in accordance with national environmental monitoring plans;
4. communicate and disseminate policies and laws on environmental protection;
5. appraise and approve environmental impact assessment reports, environmental protection plans, endorse completion of environmental protection works, instruct and organize the inspection of environmental protection plans by delegated authority;
6. award, extend and revoke licenses and certificates of environmental protection by delegated authority;
7. inspect, investigate and handle environmental violations; settle claims, accusations, petitions;
8. coordinate with provincial PCs to solve inter-provincial environmental problems; and
9. be accountable to the Government for any serious environmental pollution in the area.
10. The district-level PCs have the following responsibilities:
11. promulgate regulations, programs, and plans on environmental protection by delegated authority;
12. organize the implementation of strategies, programs, plans and duties on environmental protection;
13. inspect and endorse the implementation of environmental protection plans by delegated authority;
14. communicate and disseminate policies and laws on environmental protection;
15. inspect, investigate and handle environmental violations; settle claims, accusations, petitions; coordinate with provincial PCs in charge of solving inter-provincial environmental violations;
16. coordinate with the district PCs to solve inter-district environmental problems;
17. direct the state management tasks of the commune-level PCs on environmental protection; and
18. be accountable to the provincial PCs for any serious environmental pollution in the area.

###### The Commune PCs have the following responsibilities:

1. plan and implement the duties of environmental protection and environmental hygiene preservation in the area;
2. detect and handle environmental violations by delegated authority, or report to the agency in charge of environmental protection at the immediate higher level;
3. reconcile environmental disputes arising in the area in accordance with the law on reconciliation; and
4. preside and coordinate with production, business, and service entities in the area to disseminate information of environmental protection of such entities to the community.

##### Vietnam Fatherland Front

The Vietnam Fatherland Front has the following responsibilities:

1. mobilize member organizations and people to engage in environmental protection activity; and
2. advise, respond and observe the implementation of policies and laws on environmental protection.

##### Socio-political and socio-professional organizations

###### Socio-political and socio-professional organizations have the following responsibilities:

1. comply with the law on environmental protection; and
2. take part in activities of environmental protection.

###### Socio-political and socio-professional organizations have the following rights:

1. access to and the right to ask for environmental protection information in accordance with the law;
2. project consultation in relation to their functions, duties and authorities;
3. consultations on environmental protection and response to to state management agencies and owners of production, business and service entities concerned, in accordance with the law;
4. engagement in investigations on environmental protection at the sites of production, business and service entities in relation to their functions, duties and authorities; and
5. petition competent authorities to handle environmental violation

## GENERAL PROVISIONS ON ENVIRONMENTAL PROTECTION

### Environmental protection in manufacturing, trade, and service establishments

#### (2015 Environmental Protection Law - Art. 68, Clause 1,2,3,4)

###### Establishments are obliged to:

1. collect and treat wastewater in accordance with environmental standards;
2. collect, classify, store, treat, and discharge solid waste in accordance with the law;
3. minimize, collect, treat dust and exhaust gases in accordance with the law; ensure no leakage and discharge of noxious gases into the environment; limit noise, vibration, light and heat emissions that negatively affect the surrounding environment and employees;
4. provide enough resources and equipment for prevention and response to environmental emergencies; and
5. formulate and implement environmental protection plans;

###### Manufacturing establishments or warehouses who have the following characteristics as enumerated bellow must ensure that there are no negative impacts on residential areas:

1. flammable and/or explosive substances;
2. radioactive substances or strong radiating substances;
3. noxious substances that are harmful to human and animals;
4. dust, smell, noise emissions that negatively affect human health;
5. pollutants to water sources.

###### Manufacturing, trade or service establishments producing large quantities of waste that is likely to have adverse effect on the environment must have specialized units or specialized employees in environmental protection; and the environmental management systems of such facilities must be certified as prescribed by the government.

###### Owners of manufacturing, trade or service establishments are responsible for fulfilling the environmental protection requirements stipulated in item 1, 2, 3 above, and of relevant regulations of the law.

### Environmental protection during international economic integration

#### (2015 Law on Environmental Protection - Art. 157)

###### The state encourages bodies, organizations, and individuals to actively meet the environmental requirements of regional and international markets to enhance the competitiveness of goods and services.

###### Agencies, organizations, and individuals participating in international economic integration are responsible for preventing and minimizing negative impacts on the domestic environment.

## PROHIBITED ACTS

#### (2015 Law on Environmental Protection - Art. 7, Clause 1, 4, 5, 6, 7, 8, 9, 11,12, 13, 15)

###### Destroying and illegally extracting natural resources.

###### Transporting and burying poisons, radioactive substances, wastes and other hazardous substances in violation of environmental technical regulations.

###### Getting rid of untreated wastes or wastewater to meet the rigorous standards stipulated in environmental technical regulations; spread toxic, radioactive and other hazardous substances to into land, water and air.

###### Discharging hazardous wastewater, waste, microorganisms that have not been tested, and other toxic agents for humans and creatures, into water sources.

###### Discharging smoke, dust and gas containing toxic agents or smells into the air and emit ionized radiation in excess of the permissible limits stipulated in environmental technical regulations.

###### Generating noises and vibrations in excess of the permissible limits stipulated in environment technical regulations.

###### Importing and transporting wastes from abroad in any form.

###### Manufacturing and trading products likely to pose risks to human beings, creatures and the ecology; manufacturing and utilizing raw materials and building materials containing toxic agents in excess of the permissible limits prescribed in environmental technical regulations.

###### Sabotaging or infringing upon natural heritage sites and nature sanctuaries.

###### Damaging structures, equipment and facilities used for environmental protection.

###### Concealing acts of environmental depletion as well as interfere with environmental protection, and misrepresent information, which can cause negative consequences on the environment.

## RESOLUTION OF ENVIRONMENTAL VIOLATIONS

### Actions against violations

#### (Law on Environmental Protection - Art. 104, Clause 1, 2; Art. 160, Clause 1)

###### Organizations that violate the Law on Environmental Protection that results in environmental pollution and degradation, and losses to other organizations and individuals, shall be responsible for environmental remediation, restoration, and compensation for damages.

###### Establishments that cause serious environmental pollution shall incur penalties as prescribed by the law for administrative violations, shall be included in the list of seriously polluting establishments, and shall be compelled to take measures eradication of pollution.

### Responsibility for environmental damage

#### (2015 Law on Environmental Protection - Art. 163; Art. 164, Clause 3 Dec.40/2019/NĐ-CP - Art. 2, Clause 20)

##### Damages caused by environmental pollution and degradation include:

###### Deterioration in environmental function and usefulness; and

###### Loss of human life and health, properties and legal interests of the organizations and individuals due to such deteriorations.

##### Principles of determining personal responsibility are prescribed as follows:

1. The head of the organization shall take responsibility for any breach of law on environmental protection related to the activity of his/her organization;
2. organizations causing environmental pollution or degradation shall be responsible for remedying the consequences and compensating for the damages caused;
3. in case an individual causes environmental pollution or degradation during the execution of the tasks assigned by his/her organization, the organization shall compensate for damages caused according to the law.

##### Principles of determining facilities causing environmental pollution

Facilities causing severe environmental pollution are facilities violating regulations on discharge of wastewater, emission of dust and exhaust, causing noise pollution, vibration exceeding safe limits and on waste or burying, filling, dumping and discharging solid waste, hazardous waste against regulations on environment protection so serious that they may face additional penalty of mandatory suspension as prescribed in the decree on penalties for administrative violations in environment protection.

### The administrative violations against regulations on environmental protection

#### (Dec. 155/2016/NĐ-CP - Art. 1, Clause; Art. 4, Clause )

The administrative violations against regulations on environmental protection include:

###### Violations of regulations on environmental protection plans, environmental impact assessments, and environmental protection schemes.

###### Acts that cause environmental pollution.

###### Violations of regulations on waste management.

###### Violations of regulations on environmental protection committed by manufacturing, trade and service establishments.

###### Violations of regulations on environmental protection in the fields of importing machinery, equipment, means of transport, materials, fuels, scraps, bio-preparations;

###### Violations of regulations on prevention and control of environmental pollution, degradation, and environmental incidents.

###### Acts that obstruct the state management, inspection and imposition of penalties for administrative violations and other acts of violation of regulations on environmental protection.

##### Penalties and fines:

1. A warning;
2. The maximum fine for a violation against regulations on environmental protection incurred by an individual is VND 1,000,000,000; and if incurred by an organization is VND 2,000,000,000.

## ENVIRONMENTAL DISPUTES, COMPLAINTS, ACCUSATIONS AND LAWSUITS

### Environmental disputes

#### (2015 Law on Environmental Protection **-** Art. 161)

###### Environmental disputes include:

1. Disputes concerning rights and responsibilities for environmental protection in exploitation and use of environmental components;
2. Disputes concerning determination of causes of environmental pollution, degradation and incident;
3. Disputes concerning responsibilities for handling and remedying consequences, compensating for loss caused by environmental pollution, degradation and incident.

###### Settlement of environmental disputes shall be done in accordance with the law on non-contractual civil dispute settlement and the regulation of relevant law.

### Complaints, accusations and lawsuits

#### (2015 Law on Environmental Protection - Art. 162)

###### Organizations and individuals are entitled to file a complaint and lawsuit against any breach of environmental protection in accordance with the law.

###### Individuals are entitled to report any breach of law on environmental protection to the competent authority or person according to the law on claims and denunciations.

### Liability insurance for environmental damages

#### (2015 Law on Environmental Protection **-** Art. 162)

Organizations and individuals operating in manufacturing, business and service that have a risk of causing significant damage to the environment must buy liability insurance for environmental damages in accordance with the law.

# PRE-OPERATION PERMITS AND ASSESSMENTS

## ENVIRONMENTAL IMPACT ASSESSMENT REPORT

### Interpretation of terms

#### (Law on Environmental Protection - Art. 3, Clause 23)

Environmental impact assessment (EIA)refers to the analysis and prediction of environmental impacts of specific investment projects in order to protect the environment during implementation of such projects.

### Entities required to conduct an EIA

#### (Dec. 18/2015/NĐ-CP - Art. 12, Clause 1, 2 **|** Dec.40/2019/ND-CP Appendix II)

List of projects required to perform EIA in Garment – Textile Dyeing Industry is specified in Appendix II of Decree 40/2019/ND-CP, item: “Group of Garment – Textile Dyeing projects”:

###### Projects to build dyeing or dye-weaving establishments with a capacity of at least 1,000,000 m2 of fabric per year or at least 200 metric tons of products per year;

###### Projects to build dye-free weaving establishments with a capacity of at least 20 million m2 of fabric per year or at least 4,000 metric tons of fabrics per year;

###### Projects for textile and garment manufacturing with a capacity of at least 100,000 products per year for those involving washing and bleaching processes; or at least two million products per year for those not involving washing and bleaching processes;

###### Projects to build industrial washing and laundering establishments with a capacity of at least 100,000 products per year;

###### Projects to make silk, cotton yarn and artificial fiber with a capacity of at least 5,000 tons per year.

### Carrying out the EIA

#### (2015 Law on Environmental Protection - Art. 19; Dec. 18/2015/NĐ-CP - Art. 12, Clause 1, 2)

###### The owner of a project in Garment – Textile Dyeing Industry that is subject to EIA (*refer section 2.1.2*) shall perform the EIA by themselves, or by hiring a qualified advisory organization and be accountable to the law for the EIA results.

###### The EIA must be performed in the preparatory stage of the project

###### The result of the EIA process shall be presented under the form of an EIA Report.

###### Expenses incurred from the formulation and inspection of the EIA Report, shall be included as part of total investment budget and be covered by the project owner.

### Consultation requirements in the EIA process

#### (Law on Environmental Protection - Article 21; Dec. 40/2019/NĐ-CP - Article 1, Clause 4b)

###### During the process of performing the EIA, the project owner must carry out consultations with People's Committees of the commune, ward, or town in the project area, and organizations and communities directly affected by the project;

###### The consultation with communities under the direct impact of the project shall be carried out in the form of community meetings co-chaired by the project owner and the People’s Committee of the commune where the project is carried out.

###### The community meeting for consultation of the EIA shall be convened by the People’s Committee of the commune with participation of representatives of commune-level Vietnamese Fatherland Front, socio-political organizations, socio-professional organizations, civil groups, hamlets and villages.

###### Projects in conformity with the planning for concentrated manufacturing, trading and service provision areas under the approval of the report on EIA at the infrastructural construction stage for the project do not require the consultation.

### Revising and updating the EIA Report

#### (Law on Environmental Protection - Art. 20; Dec. 18/2015/NĐ-CP - Art. 15; Dec. 40/2019/NĐ-CP - Article 1, Clause 6)

###### Project owner must remake the EIA Report in the following cases:

1. The Project is not executed within a period of 24 months from the date on which the EIA Report is approved (the project owner has not performed any item during the construction stage of the project as prescribed by law on construction);
2. The Project location has changed;
3. Addition of investment items that have size and capacity equivalent to those in the list of Appendix II – Dec. 40/2019/ND-CP (*refer section 2.1.2*);
4. Increase of size, capacity or technology or another change making the environmental protection facilities incapable of dealing with increasing environmental problems;
5. Change in production technologies of main products; change in waste treatment technologies which possibly causes negative environmental impact as compared with the plan for EIA report approval decision
6. In accordance with project owner’s request.

###### Project owner can only make the changes specified in item 1 above, only after the EIA is re-approved by the competent authority.

###### The act of remaking, re-appraising and re-approving of the EIA Report shall be carried out in the same manner as that of the first EIA Report (*refer section 2.1.3*).

### Project owner’s responsibilities after approval of EIA

#### (Law on Environmental Protection - Art. 26; Dec. 18/2015/NĐ-CP - Art. 16; Dec. 40/2019/ND-CP - Art.1 clause 7,8,9,10; Cir. 25/2019/TT-BTNMT - Art.4 clause 5)

###### Comply with the requests specified in the approval of EIA Report.

###### Make environment management plans for the project on the basis of environmental management and monitoring programs proposed in the EIA Report and posted at the premises of the Commune People’s Committee during consultation, according to Appendix VII, template 2a. & 2.b of Dec.40/2019/ND-CP.

###### With the exception of projects to build dye-free weaving establishments and textile and garment manufacturing not involving washing and bleaching (refer section 2.1.2), and as prescribed in column 4 Appendix II of Dec. 40/2019/ND-CP, shall prepare an application for inspection and confirmation of completion of environment protection works (include waste treatment facilities and other environment protection works) before the expiry of 30-day commissioning as well as report the results of environment protection works serving the operation phase of the project according to Appendix VI, template 12 & 13 of Dec.40/2019/ND-CP to the EIA Report-approving authority for inspection and verification of the works before putting the project into official operation.

###### Construction projects for non-dye weaving establishments have to carry out operational testing of waste (waste, wastewater, emission) treatment works. Waste indicators monitoring program according to article 10 of Circular 25/2019/TT-BTNMT

###### Send the plan for operational testing of waste (water) treatment works to consulted organizations and EIA Report-approving authority according to Appendix VI, template 09 of Dec.40/2019/ND-CPat least twenty (20) workdays before conducting the pilot operational test. The pilot operation will conduct from three (03) to six (06) months.

###### If the pilot operation causes environmental incidents, it must be stopped immediately, and a report must be sent promptly to the competent agency of the state for settling, handling environmental incidents and compensating for damages according to regulations of the law.

###### In case of any change in the project size, capacity and technology which increases negative impacts on the environment in comparison with the alternatives given in the approved EIA Report, but not too serious to remake an EIA Report, the project owner must send their explanation to the agency who grants the approval, and make such change only after receiving a decision on environmental approval.

###### An application for environmental approval includes:

1. An application for change requested by the project owner using form No. 07 Appendix VI Section I issued at Dec.40/2019/ND-CP;
2. Reports on changes; environmental impacts, waste arising out of changes; impact minimizing and waste treatment solutions accompanied by changes in environmental management and supervision using form No. 08 Appendix VI Section I issued at Dec.40/2019/ND-CP.

###### Approving environmental changes for projects during construction deployment: during construction exclude the entities have changes mention in item 105 (it mentioned that renovation, expansion, upgrading, capacity increase or technological production change), for other changes (such as building/workshop design; wastewater treatment technologies...) project owner shall take consider and decide by themselves and take responsibility before law.

### EIA process flowchart

#### (Law on Environmental Protection - Art. 18, 19, 20, 26, 27; Dec.18/2015/NĐ-CP, Art. 16; Dec.40/2019/ND-CP Appendix II, VI section I; Cir 25/2019/TT-BTNMT. Appendix VI

Dec. 18/2015 - App. II

**EIA**

 e

MONRE

*Approving authority*

Province PC (DONRE)

*EIA Report*

*Structure, content*

*Entities*

Projects at risk of causing adverse impacts on the environment

* Environmental management planning.
* Implementation of environmental protection measures.
* Report on implementation results of environmental protection works
* Report on environmental protection activities

*Responsibilities of Project Owner after EIA approval*

Preface

C1. Summary of project

C2. Natural environment conditions and socio-economic conditions in the project area

C3. Assessment and predictions of environmental impact for project, proposal of measures and works to protect the environment and to respond to environmental emergencies

C4. Environmental management and surveillance program

C5. Consultation results Conclusion, propositions, and commitment

C6. Consultation with the community

Law Env.

Art. 18

Law Env.

Art. 22

**Form**

Cir. 25/2019

Template 04, App.I

Law Env.

Art. 23

Law Env.

Art. 26,27

Law on Env., Art. 26, 27

Dec. 18/2015/, Art. 16

Dec. 40/2019, App. II, Column 4

Cir 25/2019/TT-BTNMT. Appendix VI

Dec 40/2019

App. III

Dec 40/2019

All for App II except App III

## ENVIRONMENTAL PROTECTION PLANS

### Entities required to register an Environmental Protection Plan (EP Plan)

#### (2015 Law on Environmental Protection - Art. 29; Dec. 18/2015/NĐ-CP - Art. 18; Dec 40/2019/ND-CP - Art.2, clause 2)

###### Projects that are not subject to an EIA (not included in Appendix II of Decree 18/2015 / ND-CP New investment projects, project for extension of scope or capacity with the total scope and capacity of ongoing facilities and new investment portion prescribed in Column 5 Appendix II of Dec. 40/2019/ND-CP;

###### Projects/plans for business investment, projects/plans for extension of scope or capacity of business facilities which produce wastewater from 20m3/day (24 hours) to under 500m3/day (24 hours) or solid waste from 1 tonne/day (24 hours) to under 10 tonnes/day (24 hours) or emission from 5,000m3/hour to under 20,000m3/hour (including ongoing facility and extension) other than business investment projects prescribed in Column 3 Appendix II Section I issued at Dec. 40/2019/ND-CP.

###### Projects and plans not specified in Clause 1 of this Article shall be exempt from registration of environment protection plans. The management and treatment of waste and other environment protection obligations shall be carried out as per the law.

### Implementation of EP Plan

#### (2015 Law on Environmental Protection - Art. 31)

Establishments subject to registration of EP Plan (*refer section 2.2.1 clause 1 and 2*) must have an EP Plan prepared and sent to competent authority for examination and approval before the project is commenced.

### Revision and re-registration of EP Plan

#### (2015 Law on Environmental Protection - Art. 33; Clause 4, 5; Dec. 40/2019/NDCP, Art. 2 clause 12)

###### Revise and re-register the EP Plan in the following cases:

1. Facility is relocated; and
2. EP Plan is not put into operation within 24 months from the date on which it is approved.
3. The re-registration, responsibility and deadlines for certification of re-registration of the environment protection plan shall comply with Articles 2 clause 12 of Dec. 40/2019/ND-CP

###### Where project’s characteristics have changed so significantly that an EIA Report must be prepared, owners of such establishments must prepare an EIA report for submission to the competent authority to have it appraised and approved.

### Project owner’s responsibilities after approval of the the EP Plan

#### (Law on Environmental Protection - Art. 33, 34; Dec. 18/2015/NĐ-CP - Art. 19; Clause 5,6; Dec.40/2019/ND-CP - Art.2; Clause 2)

###### Implement the environmental protection measures in accordance with the approved EP Plan.

###### If there is any change in project and/or facility owner, the new project and/or facility owner must keep implementing the registered environment protection plan and give a notice of the change to the certifying authority of the environmental protection plan.

### Process of implementation of the EP Plan

#### (2015 Law on Environmental Protection - Art. 29, 30, 32, 33; Dec. 40/2019/ND-CP - App II, V)



## OTHER CASES

### Entities required to elaborate EP Schemes

#### (Dec. 18/2015/NĐ-CP - Art. 22, clause 2; Dec. 40/2019/ND-CP, Art.2, clause 13)

Any establishment put into operation without an approved EIA Report or without a registered EP Plan has a maximum of thirty-six (36) months from the effective date of the Decree 18/2015/NĐ-CP, to take one of the following remedial measures:

###### A detailed EP scheme shall be formulated by establishments that have been put into operation before April 1st 2015, and of which the scale and nature are similar to entities subject to EIA Report.

###### A simple EP scheme shall be formulated for establishments that have been put into operation before April 1st 2015, and of which the scale and nature are similar to entities subject to EP Plan.

Any organization in operation after 1st April 2015, they were be fined and requested to re-new EIA /EP in according to detail on section 2.3.2 at below.

The environmental protection scheme only applies to the above-mentioned objects and will not continue to be implemented under Article 2, Clause 13 of Decree 40/2019 / ND-CP amending and supplementing Article 22 of ND / 2015 / ND-CP

The EP scheme which has been approved or confirmed and equivalent documentation before effective date of this Decree shall take legal effect in order for the project owner to perform environment protection activities. If an approval for adjustment, confirmation of completion of environment protection works, or EP scheme is granted, such approval or confirmation shall prevail.

### Transitional provision

###### A project going through construction process but not reaching operation process and a project going through construction process (including the project of expansion of scale, increase of capacity and change of technology of an ongoing facility or industrial park) without any decision on approval for EIA report or approval for environmental protection plan or equivalent environmental dossier shall be subject to a penalty as prescribed by the Government on penalties for administrative violations in environment protection. Where the project is suitable for the planning, the project owner shall:

1. If the project has scale or capacity equivalent to the that identified in section 2.2.1, the Project owner must register an environment protection plan. An environment protection plan shall be prepared and sent to the competent authority for approval as prescribed
2. If the project has scale or capacity equivalent to that identified in section 2.1.2, the Project owner must produce an EIA report. An EIA report for the project of expansion, upgrade of environment protection works shall be prepared and sent to the competent authority for approval as prescribed.
3. The project owner shall perform and complete waste treatment works and environment protection solutions as prescribed; prepare application for inspection and confirmation of completion of environment protection works as prescribed;
4. The assessment and approval for the EIA report shall be carried out as prescribed in Article 14 hereof; the commissioning of waste treatment works, inspection and confirmation of completion of environment protection works shall be carried out as prescribed in Article 16b and Article 17 hereof; the approval for environmental protection plans shall be carried out as prescribed in Article 19 thereof.

# THE ENVIRONMENTAL DOSSIER AND PERMITS

## INTERPRETATION OF TERMS

#### (2015 Law on Environmental Protection - Art. 3, Item 19)

Environmental regulatory dossier refers to a combination of documents on the environment and environmental protection processes and activities performed by the agencies, organizations, and businesses in accordance with the law.

## ESTABLISHMENT OF THE ENVIRONMENTAL DOSSIER BY PROJECT PHASE

**OPERATION OF THE PROJECT**

**PROJECT PREPARATION**

**PROJECT IMPLEMENTATION**

* Adjust the Investment plans
* Adjustment of EIA / EP Plan
* Public posting on environmental management plan
* Implementation of environmental protection measures and environmental protection works according to approved EIA or certified EP Plan.
* Certificate of completion of environmental protection works, Report on performance of environmental protection works serving the operation phase
* Annual report on environmental protection activities (Including periodic reports on environmental monitoring, periodic reports on domestic waste, hazardous waste and industrial waste management)
* Declare and pay environmental protection fees for wastewater
* Compile a dossier to register as hazardous waste generator
* Compliance with environmental protection regulations for wastewater, air emissions, solid waste, noise, vibration, etc.
* Investment Certificate, Business License;
* EIA Report / EP Plan
* The Decision Approving the EIA Report / Certificate of Registration of EP Plan

## THE ENVIRONMENTAL REGULATORY DOSSIER

***The approval of Commune PC***

*(Household-sized projects)*

|  |  |  |
| --- | --- | --- |
| **No**  ***The approval of DONRE/ District PC***  *(Establishment is located in two or more districts;*  *Establishment has a negative impact on the environment (Establishment is similar to App. 5.1, Cir. 27/2015))* | **List of environmental regulatory dossier, permits and licenses** | **Reference in this guide** |
| 1 | Investment Certificate, Business License; | 3.2 |
| 2 | Decision Approving the EIA Report,  Certificate of Environmental Standard Registration,  Certificate of Registration of EP Plan, or  Certified EP Scheme |  |
| 3 | EIA Report, The EP Commitment,  The Registration of Satisfaction of Environmental Standards,  The EP Plan, or The EP Scheme | 2.1; 2.2; 2.3 |
| 4 | Layout of factory drawing, Drainage of Rainwater and Wastewater |  |
| 5 | Design dossier, Technical demonstration of the wastewater treatment system, Dust and exhaust treatment/air emission control, Documents for acceptance of environmental treatment works |  |
| 6 | Groundwater Exploitation Permit;  Surface Water Exploitation Permit;  Wastewater Discharge Permit | 4.9; 5.10 |
| 7 | Wastewater connection agreement | 5.6 |
| 8 | Wastewater treatment plants operational logbook; invoices and receipts from the purchase of chemicals; electricity bill, etc. |  |
| 9 | Registration as hazardous waste generator; Hazardous waste manifests; Contracts for hazardous waste collection, transportation and treatment; Periodic reports on hazardous waste management | 7.3; 7.5 |
| 10 | Contracts for collection, transportation and treatment of industrial solid waste, domestic solid waste; invoices and receipts, delivery records |  |
| 11 | Periodic reports on the results of environmental monitoring |  |
| 12 | Payment document of environmental protection fees for industrial wastewater | 5.17 |
| 13 | Minutes of inspection and investigation of environmental protection, and sanctioning decisions (if any) |  |
| 14 | Certificate of completion of environmental protection works, Report on performance of environmental protection works serving the operation phase | 2.1.7; 2.3.4 |
| 15 | Report on environmental protection activities | 2.1.7 |

## Implementing the Environmental Protection Plan in operational phase

### Entities requiring, and time of, preparation of environmental protection plan

#### (Cir 31/2016/TT-BTNMT- Art. 21; Dec.40/2019/ND-CP App. II)

###### Entities requiring preparation of an environmental protection plan: Active establishments of which form and size is equivalent to those that require preparation of environmental impact statement as defined in the Appendix II to the Decree No. 40/2019/ND-CP.

###### Owners of establishments shall be obliged to set up the environmental protection plan for construction works or projects which have been completed and officially brought into operation according to the actual progress. In case the environmental management system into which contents of the environmental protection plan are integrated, formulation of the environmental protection plan is not needed.

###### The environmental protection plan shall be considered as one of the bases for implementation of laws on environmental protection and environmental protection measures of establishments and the basis for a competent regulatory authority’s inspection.

### Contents of environmental protection plan

#### (Cir 31/2016/TT-BTNMT - Art. 22, Clause 1)

Using the sample given in the Appendix 7 of Circular 31/2016/TT-BTNMT, which must be then submitted at establishment’s offices.

### Responsibilities for implementation of the environmental protection plan

#### (Cir 31/2016/TT-BTNMT - Art. 24)

###### Owners of establishments shall be responsible for ensuring that their environmental protection plan is updated with operational status and progress; keeping all necessary documents, invoices, operational logbooks, record books and other equivalents under the instructions given in the Appendix 7 of Circular 31/2016/TT-BTNMT.

###### Preventing and responding to environmental incidents as specified in the environmental protection plan shall be provided under the following circumstances:

1. Owners of establishments must establish and ensure sufficient capacity to carry out prevention of and response to environmental incidents during production, business and service activities;
2. In the event of any environmental incidents occur, owners shall be responsible for promptly notifying organizational entities concerned by following the plan to prevent and respond to environmental emergencies or incidents; raising alarm and gathering workforce and equipment depending on the degree of environmental incidents or emergencies; and implementing pollution mitigation and environmental remediation measures upon the request of environmental protection authorities;
3. Within a maximum period of 30 days after any environmental emergency or incident occurs, owners must send the People's Committee at all levels and the Department of Natural Resources and Environment the review report on environmental emergency or incident mitigation and response;
4. Owners of those facilities that cause environmental incidents or emergencies shall be liable for damages as specified in the Law on Environmental Protection and other relevant regulations.

# WATER EXTRACTION AND CONSUMPTION

## GENERAL PRINCIPLES

#### (Law on Water Resources - Art. 3, Clause 4,5)

###### The protection of water resources is the responsibility of all agencies, organizations and individuals.

###### Water resources must be exploited in an economical (efficient) manner.

## CONSULTATION WITH COMMUNITIES, ORGANIZATIONS AND INDIVIDUALS

#### (Law on Water Resources - Art. 6; Dec. 201/2013/NĐ-CP)

Projects with the following features must consult local communities and related organizations and individals:

###### Discharge wastewater with a flow rate of 10,000 m3 per day or more;

###### Exploit groundwater with a flow rate of 12,000 m3 per day or more.

## PROHIBITED ACTS

#### (Law on Water Resources - Art. 9)

To illegally explore, exploit, and use water resources, discharge wastewater into water sources or practice groundwater drilling

## PROTECTION OF WATER RESOURCES

#### (Law on Water Resources - Art. 25, Clause 1, 3; Art. 26, Clause 1, 5; Art. 27, Clause 1a, 1d; Art. 28, Clause 1c; Art. 32, Clause 1, 2; Art. 33; Clause 2; Art. 35, Clause 1; Art. 52, Clause 1, 2, 4)

###### Organizations and individuals are responsible for protecting water resources. (Art. 25)

###### Organizations and individuals shall protect the water sources they exploit and use. They shall supervise that others do not commit acts causing pollution, degradation, and depletion of those water sources. (Art. 25)

###### The exploitation and use of water resources must comply with water resources master plans approved by competent authorities; those whose activities cause a decrease in water source functions, land subsidence, water pollution, or salinity intrusion shall remedy the consequences and, if causing damage, pay compensation as prescribed by law. (Art. 26)

###### Wastewater storage ponds and lakes and wastewater storage areas must be waterproof and spill proof to ensure that water sources are not polluted. (Art. 26)

###### Establishments that may cause water pollution incidents shall elaborate plans, procure the necessary means and equipment and implement measures to timely respond to and remedy incidents caused by them. (Art. 27)

###### Organizations and individuals causing incidents that pollute water sources, apart from being sanctioned for violation as prescribed by law, shall remedy the immediate consequences of pollution and degradation of water sources, shall improve and rehabilitate water quality in the long term, and shall compensate for damages caused by them. (Art. 27)

###### Organizations and individuals exploiting or using water resources or discharging wastewater into water sources shall monitor and supervise the exploitation and use of water, and the discharging of wastewater, according to regulations. (Art. 28)

###### Organizations and individuals are not permitted to discharge wastewater or dispose waste into Sanitary Protective Zones of domestic water supplying areas. (Art. 32)

###### Organizations and individuals exploiting water for domestic water supply shall: (Art. 32)

1. a) Regularly observe and monitor the quality of domestic water sources and ensure the quality of water sources exploited by them.
2. b) Have a plan to use alternative water sources to replace the existing source in case of an incident that pollutes water sources they are exploiting.

###### Establishments are prohibited to discharge into water sources untreated wastewater or treated wastewater that does not meet standards / technical regulations. If using toxic chemicals, establishments must take measures to prevent leakages of such chemicals which could lead to the pollution of water sources. (Art. 33)

###### Organizations and individuals exploring and using groundwater must have a permit of competent state agencies (Art. 52)

###### Use of groundwater is restricted in the following areas: (Art. 52)

1. Areas in which surface water sources can satisfy water use demands;
2. Areas in which groundwater level has continuously declined and risks depletion;
3. Areas facing the risk of land subsidence, salinity intrusion, or increasing pollution due to exploitation of groundwater;
4. Areas in which groundwater sources have been polluted and there are no technological solutions to treat the water up to quality standards;
5. Urban areas, residential zones in rural areas, industrial parks and complexes, and trade villages which have centralized systems of water supply that meet water quality and quantity requirements.

## WATER CONSERVATION

#### (Law on Water Resources - Art. 39, Clause 1a,b,c; Art. 49, Clause 1)

Organizations and individuals exploiting and using water shall implement the following measures:

###### Use water rationally;

###### Adopt plans to replace and gradually eliminate equipment which use obsolete technology and consume large amounts of water;

###### Improve and rationalize processes using water, apply advanced techniques, technologies and equipment in water exploitation and use; increase the use of recycled water and water reuse; store rain water for use.

## ENVIRONMENTAL PROTECTION OF GROUNDWATER

#### (Law on Environmental Protection - Art. 58, Clause 1,2,3,5)

###### Only permitted chemicals from the approved list released by the competent regulatory agency are allowed to be used during prospection and extraction of groundwater.

###### Take preventive measures against the pollution of groundwater caused by prospection and extraction wells. Facilities are responsible for environmental remediation at prospection and extraction sites. Abandoned exploration and extraction drill holes must be refilled according to appropriate technical process.

###### Facilities that employ harmful chemicals (and radioactive substances) must put in place preventive measures against leakage and infiltration chemicals to the groundwater.

###### Organizations or individuals who contaminate the groundwater will be responsible for remediation of the groundwater pollution.

## PERMITS FOR WATER RESOURCES

### Water resource permits

#### (Dec. 201/2013/NĐ-CP - Art. 15, Clause 1,2)

###### Types of water permits include:

1. Permit for groundwater exploration
2. Permit for exploiting and using surface water
3. Permit for exploiting and using groundwater
4. Permit for exploiting and using seawater
5. Permit for discharging wastewater into water resources

###### Every water permit has the following content:

1. Name and address of permit holder;
2. Location of the groundwater exploration, water extraction or wastewater discharge works;
3. Water sources being explored, exploited or receiving wastewater;
4. Scale, capacity, flow rate, primary parameters of the work of exploration, exploitation or wastewater discharge;
5. Water exploitation and use purpose(s);
6. Methods of water exploitation, use, and wastewater discharge;
7. Validity period of the permit;
8. The specific requirements for each cases of exploration, exploitation of water or wastewater discharge according to the licensing agency in order to protect the water sources, lawful rights and benefits of the relevant entities;
9. Rights and obligations of the holder of the permit

### Requirements for being issued with permits

#### (Dec. 201/2013/NĐ-CP,Art. 20, Clause 2, 3a, 3b , 4.)

Organizations and individuals must fulfill the following requirements in order to be issued with a permit:

###### Have an EIA report or EP scheme compatible with the approved water resource planning or, in the absence of such plan, suitable to the water source's capacity and/or capability to receive wastewater. Measures to treat wastewater included in schemes or reports must ensure that wastewater is treated up to standards and technical regulations; plans for water resource exploitation must be appropriate to the scale of the water resources and meet the requirements for protection of water resources.

###### Apart from the requirements prescribed in item # 1, the entity applying for a wastewater discharge permit must possess the following requirements:

1. equipment and qualified staff, or a contract with a qualified entity, for operating the wastewater treatment system and monitoring the wastewater discharge, if there is an available wastewater treatment system; and
2. plans to acquire the required equipment and staff in order to operate the wastewater treatment system and monitor the wastewater discharge, if the wastewater treatment system has not been built.

###### Apart from the conditions prescribed in item #1, the entitiy applying for a groundwater exploitation and use permit above 3,000 m3 per day, must have equipment and qualified staff, or have entered into contract with a qualified entity, for monitoring the activities of water exploitation.

### Validity period of permits

#### (Dec. 201/2013/NĐ-CP - Art. 21, Clause 1)

The validity period of water permits are as follows:

###### Permits for the exploitation and use of surface water and sea water are valid for a maximum duration of fifteen (15) years and a minimum duration of five (5) years, and may be extended for several times, each time shall be a minimum of three (3) years to a maximum of ten (10) years;

###### Permits for groundwater exploration shall be valid for two (2) years and may be extended only one (1) time for not more than one (1) year;

###### Permits for groundwater exploitation shall be valid for maximum ten (10) years and minimum three (3) years, and may be extended several times, each extension shall be a minimum of two (2) years and a maximum of five (5) years;

###### Permits for wastewater discharge shall be valid for maximum ten (10) years and minimum three (3) years, and may be extended several times, each extension shall be a minimum of two (2) and a maximum of five (5) years.

In case organizations or individuals require a permit with the duration which is shorter than the minimum duration prescribed by the law, the permit shall be issued or extended as requested.

### Renewal of permits

#### (Dec. 201/2013/NĐ-CP - Art. 22)

###### Extension of permits for water resource exploration, exploitation and use, or wastewater discharge into water sources, must be based on the provisions of the permit-granting and following conditions:

1. The permit is still valid and the dossier of application for permit extension was filed at least ninety (90) days before the expiry of the permit;
2. b) By the time of the extension request, the licensed organization or individual has fulfilled all obligations related to the granted permit according to the provisions of the law and there is no dispute;
3. c) By the time of the extension request, the planned water resource exploitation and use, or discharge of wastewater into water sources is in line with the country’s water resources planning.

###### If the permit renewal was not filed organizations and individuals must compile dossiers of application for new permits.

### Modification of permits

#### (Dec. 201/2013/NĐ-CP - Art. 23, Clause 2,3,4,5)

###### The cases in which a water exploitation permit is required to be modified are:

1. The water sources cannot provide the normal water supply;
2. The demand for exploitation and use of water increases while there is no solution for treatment and/or improvement of the water source;
3. An emergency case which requires the exploitation of water to be limited;
4. The water exploitation caused land subsidence, damage to the works, saltwater intrusion, exhaustion and/or water pollution
5. The actual amount of water being exploited of the permit holder is less than 70% compared with permitted water amount for consecutive twelve (12) months without any explanation sent to the licensing agency;
6. The permit holder requests modifications to the permit other than those prescribed in Clause 3 of this item.

###### The cases in which the wastewater discharge permit is required to be modified:

1. The water resources cannot receive wastewater anymore;
2. The demand for wastewater discharge increases while there is no solution for treatment and/or improvement of the water source;
3. An emergency case which requires the wastewater discharge to be limited;
4. The function of the water sources changed;
5. The permit holder requires modifications to the permit other than those prescribe in Clause 3 of this item.

###### The contents in a permit which cannot be modified are:

1. The exploited or used water sources; the receiving wastewater sources;
2. The amount of water extracted, if exceeds by 25% the amount in the issued permit;
3. The volume of discharged water, if exceeds by 25% the amount in the issued permit;
4. Parameters and concentration of pollutants that differ form the applied standards in the wastewater discharge permit, except when the licensing agency or the permit holder require higher standards be applied. If any content prescribed in this clause is required to be modified, the permit holder shall prepare an application for a new permit.

###### In case the permit holders want to modify their permit, an application for modifying permit shall be prepared according to the regulations; if the licensing agency modifies a permit, it must notify the permit holders at least ninety (90) days before the modification.

### Suspension of permits

#### (Dec. 201/2013/NĐ-CP - Art. 24)

###### A permit shall be suspended if its holder commits one of the following violations:

1. Violate the requirements of the permit causing pollution and/or exhaustion of the water source;
2. Transfer the water exploitation right without the approval of competent agencies;
3. Fail to fulfill financial obligations according to the regulations;
4. Use the permit for illegal activities.

###### Suspension period of the permit is:

1. Not more than three (3) months if it is a permit for groundwater exploration;
2. Not more than twelve (12) months if it is a permit for water exploitation and use, or a wastewater discharge permit.

###### During the suspension of the permit, the holder does not have the rights related to the permit and must take remedial measures and compensate for any damage (if any) according to the regulations of the Law.

###### If the period of the suspension of the permit is over but the licensing agency does not have any decision, the holder regains the rights and takes on obligations of the permit.

### Revocation of permits

#### (Dec. 201/2013/NĐ-CP - Art. 25)

###### A permit shall be revoked in the following cases:

1. Any document or information in the application for the permit is found to be forged or falsified;
2. The permitted organization is dissolved or declared bankrupt by the courts
3. The permit holder commits violations against the decision of suspension of the permit, repeats a violation once or more against the regulations of the permit.
4. The permit is granted but not in accordance with regulations.
5. The permit is revoked by competent authorities due to National defense and security reasons, national or public benefits;
6. The permit is granted but its holder does not fulfill the financial obligations of the permit

###### If the permit is revoked as prescribed in points a and c of item 1 above, the permit holders shall only be considered for the grant of new permits within three (3) years from the revocation date and all the obligations related to the revocation are fulfilled.

###### If the permit is revoked as prescribed in point d of item 1 above, the licensing agency shall consider issuing another permit to the holder;

###### If the permit is revoked as prescribed in point e of item 1 above, the holder shall receive compensation for damages and receive a refund of the fee for permit issuance according to the regulations of the law.

### Return of permit and termination of permit validity

#### (Dec. 201/2013/NĐ-CP - Art. 26)

###### The holder of a water resource permit may return the permit to the licensing agency with explanation if the holder no longer wishes to use the permit.

###### The permit validity shall be terminated in the following cases:

1. The permit is revoked;
2. The permit is expired;
3. The permit is returned.

###### If the permit validity is terminated, the relevant rights shall also be lost.

### Reissuance of permits

#### (Dec. 201/2013/NĐ-CP - Art. 27)

###### A permit is reissued in the following cases:

1. The permit is lost or damaged;
2. The name of the permit holder changed due to the transfer, merger, division or restructuring of the organization in which the manager and/or the operator of the work of water exploration, exploitation or wastewater discharge are changed but the other contents remain unchanged.

###### The validity period of the reissued permit is the remaining valid duration of the existing permit.

## REGISTER, LICENSE OF EXPLOITATION, USE OF WATER

### Register, license for exploitation and use of water

###### 

### Application for issuing, renewing, modifying permits for groundwater exploitation

#### (Dec. 201/2013/NĐ-CP - Art. 31, clause 1,2)

###### Every application for issuing a groundwater exploitation permit must include:

1. The letter of request for issuance of the permit;
2. An outline of the area and location of the groundwater exploitation;
3. The exploration result on the water reserve of the groundwater source and the exploitation methods if the extractive capacity is 200 m3/ day or above; or the result of construction of exploitation wells if the capacity of the work is below 200 m3/day (This well is an exploratory well and has the qualified results to be exploited and will now apply for water exploitation); the report on the status of water exploitation if the exploitation work is in operation.
4. Results of water quality analysis obtained within six (06) months before the submission of the application.
5. If the groundwater exploitation work has not been built, the application for issuing the permit must be submitted in the stage of investment preparation.

###### Every application for renewing or modifying a permit for groundwater exploitation includes:

1. The written request for renewal or modification of the permit;
2. Report on the exploitation of the water and adherence to the regulations of the permit. If the capacity of the work, the number of exploitation boreholes or level of the exploited water needs to be modified, the exploitation methods are required to be specified;
3. Results of water quality analysis obtained within six (0) months before the submission of the application;
4. A copy of issued permit.

### Applications for issuing, renewing and modifying permits for exploitation of surface water and seawater

#### (Dec. 201/2013/NĐ-CP - Art. 32, clause 1,2)

###### Every application for issuing the permit for exploitation of surface water or seawater includes:

1. The letter of request for issuance of the permit;
2. The scheme for water exploitation if the work has not been built; the report on the water exploitation enclosed with the procedures for operation if the work is built (if the procedures for operation is required);
3. Results of water quality analysis obtained within three (3) months before the submission of the application;
4. A map of the area in which the location of the work is marked.
5. If the work of exploitation of surface water or seawater has not been built, the application for issuing the permit must be submitted in the stage of investment preparation.

###### Every application for renewal or modification of a permit for exploitation of surface water and seawater includes:

1. The written request for renewal or modification of the permit;
2. Report on the exploitation of the water and adherence to the regulations of the permit. If the capacity of the work, methods, policy and procedures for exploiting water need to be modified, the scheme of water exploitation is required to be enclosed;
3. Results of water quality analysis obtained within three (3) months before the submission of the application;
4. A copy of issued permit.

## CHARGE FOR GRANTING WATER EXPLOITATION RIGHT

#### (Law on Water Resources - Art. 65, Clause 1b, 2; Dec. 201/2013/NĐ-CP - Art. 40, Clause 1b)

###### Organizations and individuals that exploit water resources for commercial purposes shall pay a fee granting the water exploitation rights.

###### The fee is determined by the quality and type of water resource, the conditions of exploitation, scale, time of exploitation, and water use purposes.

## HANDLING ADMINISTRATIVE VIOLATIONS AGAINST WATER RESOURCES

#### (Dec. 36/2020/NĐ-CP, Art. 2, 4, 7, 8, 9, 10, 12, 20, 21, 22, 23, 24, 27, 28,29)

###### Principal penalties:

1. A warning;
2. A fine: The maximum fine level for an administrative violation of 500,000,000 VND shall be imposed on an organization;
3. Deprivation of the right to use the permit
4. Additional penalties: An entity committing administrative violation may subject to the nature and severity of the violation, face one or several additional penalties.
5. Deprivation of the right to use permits from 01 month to 24 months;
6. Suspend the formulation, implementation of projects on water resources from 01 month to 12 months

###### Remedial measures: In addition to principal and additional penalties, an entity that commits administrative violations may be liable to one or more remedial measures.

###### Administrative violations against regulations on water resources include:

1. Violations against regulations on capacity requirements for formulating schemes, reports in application for water license
2. Violations against regulations on monitoring and observation of water resources in course of water extraction and use, and discharge of wastewater into water bodies
3. Exploration, extraction and use of water resources without registration or license as regulated
4. Violations against regulations in license for exploration, extraction and use of water resources.
5. Violations against regulations on transfer of right to extract water and falsification of water license.
6. Discharge of wastewater into water source without any license as regulated
7. Violations against regulations in license to discharge wastewater into water source
8. Violations of regulations on water resource protection
9. Violations of regulations on prevention and control of pollution, degradation and depletion of water resources
10. Violations of regulations on response to water pollution incidents
11. Violations of regulations on prevention of saltwater intrusion
12. Violations of regulations on land subsidence prevention and monitoring
13. Violations of other regulations on water resource management.

# WASTEWATER MANAGEMENT

## INTERPRETATION OF TERMS

#### (Dec. 38/2015/NĐ-CP - Art. 3, Clause 5, 6, 7; Dec. 80/2014/ND-CP - Art. 2, Clause 11, 12, 15, 16)

###### ***Wastewater***means water with altered characteristics and nature, discharged from production, business, services, daily-life activities or other activities.

###### ***Liquid waste*** means product, solution, or material in liquid state expired or discharged from the use, production, business, services, daily life activities, or other activities. If liquid waste product is discharged along with wastewater, it is called wastewater.

###### ***Wastewater collection system*** is the place the wastewater is discharged into, including: sewer, rivers, streams, ditches, canals, lakes, ponds, marshes, coastal waters, territorial waters and others.

###### ***A rainwater drainage system*** *includes network of sewer and channels for collecting and carrying rainwater, detention basins, pump stations, catch basins, rainwater inlets and outlets and other auxiliary structures for collecting and draining rainwater.*

###### ***A wastewater drainage system*** includes network of sewer, combined sewer overflows, sewers for collecting and carrying wastewater, pump stations, wastewater treatment plants, discharge outlets etc. and other auxiliary structures for collecting, draining and treating wastewater

###### ***Connection points*** are the locations through which the discharging entities discharge wastewater into drainage systems.

###### ***Discharge points*** are the locations where wastewater from drainage systems is discharged into wastewater collection system

## GENERAL PRINCIPLES OF WASTEWATER MANAGEMENT

#### (2015 Law on Environmental Protection, Art. 99; Dec. 38/2015/NĐ-CP, Art.36, Art. 54, Clause 1,2,3)

###### Wastewater shall be collected and treated in accordance with environmental standards.

###### Wastewater that contains hazardous elements beyond the permissible limits must be managed in accordance with regulations on hazardous wastes.

###### Wastewater must be managed through minimization, re-use, collection and treatment meeting environmental standards.

###### Organizations and individuals discharging wastewater must pay fees and service charges for wastewater treatment as prescribed by law.

###### Activities aimed at reducing and reusing wastewater are encouraged.

###### Waste source owners shall be responsible for the reuse, recycle, treatment, co-treatment, and recovery of energy from, non-hazardous liquid waste products meeting environmental standards.

###### Non-hazardous liquid wastes treated in wastewater treatment system on site of the generating establishment or industrial zones are to be managed under the provisions of wastewater management.

###### Non-hazardous liquid wastes that are not treated at the generating establishment will be transferred to wastewater treatment systems only upon written approval from the agency having approved the EIA Report, EP Plan or EP Scheme (or equivalent dossiers) for such wastewater treatment facilities.

## PROHIBITED ACTS

#### (Law on Water Resources – Art. 9, Clause 1, 2, 3)

###### To dump hazardous and non-hazardous solid and liquid waste into water sources.

###### To discharge wastewater into Sanitary Protective Zone of domestic water supplying areas.

###### To discharge untreated wastewater or treated but not meeting standards or technical regulations into water sources.

###### To discharge wastewater into the ground through drilled or dug wells

## WASTEWATER TREATMENT SYSTEM

#### (Law on Environmental Protection - Art. 101, Clause 2, 3, 4)

###### Every wastewater treatment system must have:

1. have a technology process that is suitable to the type of wastewater that needs treatment;
2. have treatment capacity that is sufficient for the amount of wastewater generated;
3. environmental standardstreatment of the wastewater;
4. wastewater discharge outlets located at positions convenient for inspection and supervision; and
5. regular operations.

###### The manager of the wastewater treatment system will periodically monitor wastewater quality before and after the treatment. Monitoring data will be kept for wastewater treatment system inspection.

###### Establishments that produce large amount of wastewater likely to harm the environment must carry out automatic environmental monitoring and send data to competent authorities as prescribed by the Ministry of Natural Resources and Environment.

## COLLECTION AND TREATMENT OF WASTEWATER

#### (Law on Environmental Protection- Art. 100, Clause 2, 3; Dec. 38/2015/NĐ-CP - Art. 37, Clause 3)

###### Establishments must collect and treat wastewater in accordance with environmental standards.

###### Establishments must have separate systems for rainwater and wastewater collection.

###### Establishments must treat wastewater in one of the following forms:

1. Treat wastewater on-site in the establishment’s wastewater treatment system. Treated wastewater shall meet the environmental technical regulations before being discharged into the environment;
2. Transfer wastewater to the centralized wastewater treatment system of industrial parks or trade villages where the establishment is located. Wastewater must meet the requirements for input wastewater before it enters the centralized wastewater collection and treatment system;
3. Transfer wastewater to licensed units for treatment outside the establishment as prescribed below:
   * Hazardous wastewater is to be managed in accordance with regulations on hazardous waste management;
   * Non-hazardous wastewater shall only be transferred to appropriate functional units for treatment.

## WASTEWATER CONNECTION AGREEMENT

#### (Cir. 35/2015/TT-BTNMT - Art. 9, Clause 1, 4; Cir. 31/2016/TT-BTNMT - Art. 6, Clause 1)

Wastewater from establishments operating in industrial parks must be treated according to the conditions specified in the written agreement signed with the owner of the industrial park, before being connected to the park’s wastewater collection system for further treatment at the centralized wastewater treatment plant.

##### Cases exempted from connection

###### Establishments that have wastewater treatment measures complying with national regulations for discharge into water sources and if the connection to the centralized wastewater collection and treatment system of the industrial park causes unreasonable costs to such establishment.

###### Establishments generating a wastewater volume beyond the receiving and treatment capacity of the centralized wastewater treatment system of the industrial park and having their own wastewater treatment system meeting environmental technical regulations.

###### Establishments located in industrial parks with no centralized wastewater treatment system and having their own wastewater treatment system meeting environmental technical regulations.

## DISCHARGE OF WASTEWATER INTO WATER SOURCES

#### (Law on Water Resources - Art. 37, Clause 2, 3; Dec. 201/2013/NĐ-CP, Art. 16, clause 3b, 3c.; Cir.27/2014/TT-BTNMT - Art. 3, Clause 5a)

###### The construction, renovation or upgrading of production or business establishments must include investments for the construction of a collection system segregating rainwater and wastewater; wastewater treatment system; drainage system; conduits for wastewater ensuring technical regulations and standards.

###### All organizations and individuals discharging wastewater into water sources must be licensed by competent state agencies, except when:

1. Wastewater discharged is less than 5 m3/day-night and is free from harmful chemicals (and radioactive substances);
2. Wastewater is discharged into the wastewater collection and treatment system of facilities that are permitted by competent authorities to treat and discharge wastewater into water sources. The establishment shall have a signed agreement or contract with the wastewater collection and treatment facility.

###### Textile and garment manufacturing discharging less than 5 m3/day-night are required to obtain a permit for discharging wastewater into water sources, if they include dyeing, pattern printing, or washing processes.

## WASTEWATER MANAGEMENT

#### (Cir. 31/2016/TT-BTNMT - Art. 18; Dec.40/2019/ND-CP Art.3 clause 20)

###### Establishments located outside of an industrial zone or industrial cluster that operate their own wastewater treatment system and have a flow volume of at least 30 m3/day-night must keep a logbook of operation of this system which is fully compiled and retained for a period of at least two (02) years. The operational logbook must be written in the Vietnamese language and must include: flow volume, operational parameters, effluent and influent monitoring results (if any), type and amount of chemicals used, and volume of waste sludge produced by the wastewater treatment system.

###### Establishments required to perform automatic and continuous wastewater monitoring include:

1. Industrial parks and facilities in industrial parks which are exempt from connection to the concentrated wastewater treatment system
2. Establishments of a kind of manufacturing possibly causing environmental pollution prescribed in Appendix IIa Section I issued herewith and having volume of discharge 500m3/day (24 hours) or higher according to the design capacity of the wastewater treatment system;
3. Establishments not specified in Points a, b of this Clause and having volume of discharges of 1,000m3/day (24 hours) or higher according to the design capacity of the wastewater treatment system;
4. Facilities which carried administrative penalties for discharging wastewater exceeding technical regulations on environment but still repeat that offense or committed such offense multiple times before facing the penalties.

###### Those establishments that are not required to perform automatic and continuous wastewater monitoring are those:

1. Connecting points to the concentrated wastewater treatment system,
2. Facilities which have treatment system to treat wastewater produced from periodic tank cleaning separately from other wastewater treatment system,
3. Facilities which have cooling water not containing chlorine or disinfectants.

###### Establishment generating at least 1,000 m3/day-night within the precincts of an industrial zone or industrial cluster and exempted from connecting to the centralized wastewater collection and treatment system, shall manage wastewater in compliance with regulations in Cir. 31/2016/TT-BTNMT, Article 18, Clause 2 (item 2 above)

###### Establishments prescribed in Clause 2 hereof must install automatic and continuous wastewater monitoring system (including automatic and continuous monitoring equipment and automatic sampling equipment) with equip CCTV and transmit data directly to DONRE before December 31, 2020.

###### In case where a project prescribed in Clause 2 hereof is under construction phase, it must install the automatic and continuous wastewater monitoring system before it is put into operation. In a case prescribed in Point d Clause 2 hereof, it must install automatic and continuous wastewater monitoring system within the period of time mentioned in the decision on penalty for administrative violation.

## RIGHTS AND OBLIGATIONS FOR DISCHARGING WASTEWATER INTO WATER SOURCES

#### (Law on Water Resources - Art. 38)

###### Organizations or individuals granted permit to discharge wastewater into water sources have the following rights:

1. Discharge wastewater into water sources within prescribed limits;
2. Be compensated by the State in case the permit is revoked before the expiration;
3. Claim organizations and individuals causing damage to their lawful rights and benefits for compensation as prescribed by law.
4. Request competent state agencies for a permit extension, change of expiration, modifications to the content of the permit as prescribed by law;
5. Return permit as prescribed by law;
6. Transfer, lease, inherit, mortgage, and use as guarantee, their assets invested in wastewater discharging works as prescribed by law;
7. Lodge complaints and initiate lawsuits against acts infringing upon their lawful rights and benefits related to the discharge of wastewater into water sources as prescribed by law.
8. 2. Organizations or individuals granted permit to discharge wastewater into water sources have the following obligations:
9. Abide by the law on water resources and comply with the contents of the granted permit;
10. Perform their financial obligations as prescribed by law;
11. Ensure wastewater is treated up to applicable technical regulations and standards during the course of discharging wastewater into water sources;
12. Not obstruct or cause damage to the lawful discharge of wastewater into water sources of other organizations or individuals;
13. Provide full and truthful data and information on their discharge of wastewater into water sources when requested by competent state agencies;
14. Implement measures to prevent and remedy water source pollution caused by their discharge of wastewater as prescribed by regulations;
15. Monitor the flow and quality of wastewater and comply with the regime of information and reporting as prescribed by regulations;
16. Pay compensation to organizations and individuals who are impacted by their unlawful discharge of wastewater;
17. Other obligations as prescribed by law.

###### Organizations or individuals granted permit to discharge wastewater into water sources have the following obligations:

1. Abide by the law on water resources and comply with the contents of the granted permit;
2. Perform their financial obligations as prescribed by law;
3. Ensure wastewater is treated up to applicable technical regulations and standards during the course of discharging wastewater into water sources;
4. Not obstruct or cause damage to the lawful discharge of wastewater into water sources of other organizations or individuals;
5. Provide full and truthful data and information on their discharge of wastewater into water sources when requested by competent state agencies;
6. Implement measures to prevent and remedy water source pollution caused by their discharge of wastewater as prescribed by regulations;
7. Monitor the flow and quality of wastewater and comply with the regime of information and reporting as prescribed by regulations;
8. Pay compensation to organizations and individuals who are impacted by their unlawful discharge of wastewater;
9. Other obligations as prescribed by law.

## WASTEWATER DISCHARGE PERMITS

### Process of discharge of wastewater into water sources

* *The capacity does not exceed 5 m3/day-night and does not contain harmful chemicals, radioactive substances;*
* *Wastewater is discharged into the wastewater collection and treatment system of facilities that are permitted by competent authorities to treat and discharge wastewater into water sources. The establishment shall have a signed agreement or contract with the wastewater collection and treatment facility.*

*Entities* ***required to*** *register and ask permit*

**WASTEWATER DISCHARGE PERMIT REGISTRATION**

*Entities* ***not required*** *to register and ask permit*

Law on Water Resources, Article 37

Dec. 201/2013, Art. 16; Cir. 27/2014/TT-BTNMT, Art. 3, Clause 5a

- *All organizations and individuals* ***are required*** *to register and ask for permit, except entities* ***not required*** *to register and ask for permit*

*- Textile and Garment establishments discharging less than 5 m3/day-night if including dyeing, printing and washing processes (Cir. 27/2014/TT-BTNMT Art. 3 Clause 5a).*

Applications for issuing, renewing and modifying wastewater discharge permits

Dec. 201/2013,Art. 33

*New application*

*Renewing or Modifying*

**Form**

Cir. 27/2014,

App. Form 10/37

Contents of the project/report is request to the permit

Cir. 27/2014, Art. 9

**Form**

Cir. 27/2014,

App. Form 09/ 35/36

**Form**

Cir. 27/2014,

App. Form 35

Project on discharge of wastewater into water sources

*(for cases where there is not yet discharge of wastewater)*

Report on discharge of wastewater into water sources

*(for cases of discharging wastewater into water sources)*

Report on the status of discharge of wastewater into water sources and the implementation of the regulations in the permit

*(in case of extension or adjustment of permits)*

**Form**

Cir. 27/2014,

App. Form 36

**Form**

Cir. 27/2014,

App. Form 37

### Applications for issuing, renewing and modifying wastewater discharge permits

#### (Dec. 201/2013/NĐ-CP - Art. 33, Clause 1,2)

###### Every application for issuing the wastewater discharge permit shall include:

1. A written request for the issuance of the permit;
2. The scheme for discharging wastewater and the procedures for operating the wastewater treatment system in case the discharge of wastewater has not started; report on the wastewater discharge and the procedures for operating the wastewater treatment system, if the wastewater is being discharged;
3. Results of quality analysis of the receiving water source at the discharge location; results of quality analysis of wastewater before and after treatment. The date on which the samples for water quality analysis are taken must be within three (03) months prior to the filing date.
4. A map of the area in which the wastewater is being discharged.

If the wastewater discharge work has not been built, the application for issuing the permit must be submitted in the stage of investment preparation.

###### Every application for renewing or modifying wastewater discharge permit should include:

1. A written request for renewing or modifying the permit;
2. Results of analysis of the quality of the wastewater after treatment and the receiving waters at the discharge location. The date on which the samples for water quality analysis are taken must be within three (03) months of the submission of the application;
3. Report on the wastewater discharge and the adherence to the regulations of the permit. If the flow, methods, policy and procedures for discharging wastewater need to be modified, the wastewater discharging scheme is required to be enclosed;
4. A copy of issued permit

## REQUIREMENTS FOR TRANSFERING OF NON-HAZARDOUS WASTEWATER

### For non-hazardous wastewater transfer facilities:

#### **(**Cir. 31/2016/TT-BTNMT - Art. 20, Clause 1)

###### Draw up the plan to transfer, handle and treat wastewater as specified in the approved EIA-Report, certified EP Plan, approved Detailed EP Scheme, certified Simplified EP Scheme or other equivalents;

###### Comply with the national technical regulations on wastewater as applicable to wastewater collection and treatment establishments;

###### Hold a wastewater treatment contract with a wastewater collection and treatment establishment which is in compliance with national technical regulations on wastewater;

###### Have infrastructure facilities for temporarily storing wastewater to prevent spill, overflow and leakages into the surrounding environment

###### Transfer wastewater only to the wastewater collection and treatment establishment which has signed the wastewater treatment contract agreeing to the method of wastewater treatment and wastewater volume in the plan stipulated in Cir. 31/2016/TT-BTNMT, Article 20, Clause 1a (Item 1 above);

###### Assume responsibilities for transporting wastewater that fully conforms to regulations laid down in Cir. 31/2016/TT/BTNMT, Art. 20 (refer section 5.11.2); Wastewater transfer must be fully recorded in the periodic environmental monitoring report as prescribed;

###### Keep a logbook written in the Vietnamese language and retained for a minimum period of two (02) years which records details about time, method and volume of transferred wastewater.

### For wastewater transportation:

#### **(**Cir. 31/2016/TT-BTNMT - Art. 20, Clause 1)

###### Wastewater can only be transferred through water mains. These mains must be designed and installed in accordance with technical regulations to avoid leakages into surrounding areas, and must have valves and flow measurement meters as specified in the plan.

###### Carry wastewater generated from pipe rinses or hydraulic pressure tests by means of transport, which must conform to the following requirements:

1. Such means of transport must conform to traffic eligibility requirements as prescribed by laws on transportation, and must be placarded with the sign: "non-hazardous waste inside" with appropriate writing size at the front, rear and both sides.
2. Storage equipment or water tank must be airtight, watertight, and prevent leakage or corrosion risks from contact with wastewater.

## MONITORING OF WASTEWATER DISCHARGE

#### **(**Dec. 38/2015/NĐ-CP - Art. 39, Clause 1, 3, 4; Dec.40/2019/ND-CP Art.3 clause 20)

###### Ongoing facilities, industrial parks and projects having a scale and capacity equivalent to the projects/plans subject to EIA report and total volume of wastewater discharged to the environment (according to the total design capacity of wastewater treatment systems or the volume of wastewater approved in the EIA report and equivalent documents) of 20m3/day (24 hours) or higher, excluding connecting points to concentrated wastewater treatment system of the industrial park, shall perform regular wastewater monitoring every 3 months. If technical regulations on environment or regulations on environmental monitoring techniques promulgated by the MONRE stipulate monitoring frequency of certain particular environment pollution parameters by sectors, such regulations shall prevail.

###### Ongoing facilities, industrial parks and projects having scale and capacity equivalent to the projects/plans subject to registration of environment protection plan and total volume of wastewater discharged to environment (according to the total design capacity of wastewater treatment systems or the volume of wastewater registered in the environmental protection plan) is 20m3/day (24 hours) or higher, excluding connecting points to concentrated wastewater treatment system of the industrial park shall perform regular wastewater monitoring every 6 months. If technical regulations on environment or regulations on environmental monitoring techniques promulgated by MONRE stipulate monitoring frequency of certain particular environment pollution parameters by sectors, such regulations shall prevail.

## AUTOMATIC MONITORING OF WASTEWATER

#### (Dec.40/2019/ND-CP Art.3 clause 20)

###### Monitoring parameters covered by the automatic monitoring include: flow volume of influent and effluent wastewater, pH level, temperature, COD, TSS and ammonia.

###### For projects and facilities of a kind of manufacturing possibly causing environmental pollution prescribed in Appendix IIa Section I issued herewith, particular environmental parameters by sector shall be decided by the approval authority of EIA report or certification authority of environmental protection plan.

###### For cooling water containing chlorine or chlorine-based disinfectants, monitoring is required only for the following parameters: flow, temperature and chlorine.

###### Automatic and continuous wastewater monitoring system with CCTV must undergo testing, survey, and calibration as per the law on science and technology, standards, meteorology and quality.

## COLECTING AND REPORTING INFORMATION OBTAINED THROUGH MONITORING PROCESS

#### (Cir. 31/2016/TT-BTNMT - Art. 27)

###### Owners of establishments must safely store monitoring data from the automatic environmental monitoring process as electronic files. Monitoring data should be stored for a minimum period of three (03) years.

###### Owners of establishments shall be responsible for submitting monitoring results to MONRE/DONRE/HEPZA, as applicable.

###### Owners of establishments subject to automatic monitoring of emissions shall be responsible for posting and publishing monitoring results on their websites (if available).

## NATIONAL TECHNICAL REGULATIONS

The applicable national technical regulations are listed below:

|  |  |  |
| --- | --- | --- |
| **STT** | **Regulation** | **Note** |
| 1 | QCVN 13-MT: 2015/BTNMT | National Technical Regulation on the effluent of textile industry |
| 2 | QCVN 14-MT:2015/BTNMT | National Technical Regulation on domestic wastewater |
| 3 | QCVN 40:2011/BTNMT | National Technical Regulation on Industrial Wastewater |
| 4 | Wastewater standard | Limits for receiving wastewater from EPZ, IZ, IC. |

## MANAGEMENT TREATED WASTEWATER

#### (Dec. 38/2015/NĐ-CP - Art. 40, Clause 1,2)

###### Wastewater after treatment must be collected for reuse or discharged into water collection systems.

###### The re-use of treated wastewater must comply with specific provisions for each purpose of use.

## ENVIRONMENTAL PROTECTION FEE ON WASTEWATER

### Entities subject to levy

#### (Dec. 53/2020/NĐ-CP Art. 2, Clause 1, 2đ)

The entities subject to environmental protection fees are industrial and domestic wastewater generators, including industrial wastewater from textile dyeing and garment industry, except for the exemption as stipulated in Article 5 of Dec. 53/2020/NĐ-CP (refer section 5.17.3).

### Fee payers

#### (Dec. 53/2020/NĐ-CP Art. 4)

###### Facilities discharging wastewater specified in ***Entities subject to levy*** (see section 5.17.1) shall incur the environmental protection fee on wastewater.

###### The entities discharging wastewater into a centralized wastewater treatment system and having paid for wastewater treatment service shall be exempt from the environmental protection fee on wastewater.

###### Industrial production facilities when using water sourced from a clean water supply for their activities of production and processing shall incur the environmental protection fee on industrial wastewater (domestic wastewater shall be exempted from the environmental protection fee).

### Fee exemption

#### (Dec. 53/2020/NĐ-CP Art. 5, clause 4,5)

The environmental protection fee on wastewater is exempted in the following circumstances:

###### Water that circulates in a manufacturing and processing facility and is not discharged into the environment in any form (liquid, solid and gas);

###### Cooling water for machinery and equipment, which is not in direct contact with any pollutant and is discharged through a separate conduit;

###### Overflowing rainwater (except that in chemical plants).

### Fee rate

#### (Dec. 53/2020/NĐ-CP Art. 6, clause 2)

###### Facility discharges less than 20m3/day-night of wastewater (24h) apply fixed fee:

* + In 2020: 1,500,000 vnd/year
  + From January 1, 2021 onwards, follow the table below:

|  |  |  |
| --- | --- | --- |
| **No** | **Average wastewater flow (m3/day-night)** | **Fee rate (VND/year)** |
| 1 | From 10 to less than 20 | 4.000.000 |
| 2 | From 5 to less than 10 | 3.000.000 |
| 3 | Less than 5 | 2.500.000 |

###### Facility discharges more than 20m3/day-night of wastewater (24h) fee shall be calculated in the following manner: F = f + C

In which:

* + **F:** Amount of fee payable;
  + **f**: Fixed fee - 1,500,000 VND/year; (from January 1, 2021 is 4,000,000VND/year); in case the facility starts operation after the first quarter, the payable fee amount calculated for the period from the starting quarter to the end of the year, the fee for 01 quarter = f / 4.
  + **C**: Variable fee, based on the total content of pollutants in the effluent and the fee rate applicable to each pollutant. The variable fee is calculated as per the following table:

|  |  |  |
| --- | --- | --- |
| **No.** | **Indicator** | **Fee rate - (VND/kg)** |
| 1 | Chemical oxygen demand (COD) | 2,000 |
| 2 | Total suspended solids (TSS) | 2,400 |
| 3 | Mercury (Hg) | 20,000,000 |
| 4 | Lead (Pb) | 1,000,000 |
| 5 | Arsenic (As) | 2,000,000 |
| 6 | Cadmium (Cd) | 2,000,000 |

###### The indicator is determined based on the current wastewater The indicator is determined based on the current wastewater national technical regulation. If the facility's wastewater does not have relevant national technical regulations, indicators included will be those in the environmental dossier approved by the environment management agency.

### Determination of the fee amount payable

#### (Dec. 53/2020/NĐ-CP Art. 7, clause 2a)

For industrial wastewater, the amount of environmental protection fee on industrial wastewater shall be calculated as follows:

###### Facility discharges less than 20m3/day-night of wastewater in according to Article 6 clause 2a;

###### Facility discharges more than 20m3/day-night of wastewater, fee shall be calculated in the following manner : Fq = (f/4) + Cq. Where:

* + Fq is the quarterly fee amount payable (VND); and Cq is the variable fee amount payable in the quarter.

###### The variable fee (C) shall be determined by pollutant as follows:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Payable amount of environmental protection fee on industrial wastewater (VND) | = | Total volume of effluent (m3) | x | Content of pollutants in wastewater (mg/l) | x | 10-3 | x | Environmental protection fee rate for industrial water of polluting substances (VND/kg) |

Timeline for calculation of the wastewater fee is based on the periodic wastewater monitoring quarterly data. If the establishment has a regular wastewater monitoring frequency of every 6 months, the quarterly calculation shall be based on the observed data of the previous quarter

Determination of the volume of effluent:

* + The volume of effluent shall be determined according to the wastewater flow meter, if available;
  + In the absence of a wastewater flow meter, the quarterly volume of effluent shall be determined based on the actual measurements of the environment governing authorities, or it shall be deemed equal to 80% of the water consumption, or it shall be determined according to the quarterly environmental impact assessment report.
  + For establishments subject to automatic and continuous monitoring of wastewater according to law: The calculation of payable fee is determined for each 24-hour. The content of pollutants charged, and total wastewater effluent are calculated using the daily average (24hour) value of the measurement results. If the parameters are not included in the automatic and continuous wastewater monitoring parameters, the content of pollutants are according to the periodic observed data.

###### If the establishment has multiple discharge points, the variable fee is the total variable fee determined at each wastewater discharge point.

### Declaration, assessment of declarations and fee payment

#### (Dec. 53/2020/NĐ-CP Art. 8, clause 2)

Every fee payer will:

###### Where the facility discharges more than 20m3/day-night of wastewater, within 20 days of the first month of the succeeding quarter they must notify the relevant fee; the accuracy of such declaration must be assured and the fee collection agency shall be given support to verify the fee amount charged to the payer and to examine sources of discharge on periodic or ad-hoc basis. Deposit fully and precisely the payable amount of fee, into the temporary collection account at the State Treasury upon being notified by the DONRE, in no more than 10 days from the date of notification.

###### Facility discharges less than 20 m3/day-night must pay the fixed fee stipulated (refer section 5.17.4) in lump sum for the entire year upon being notified by the fee collection agency, no later than the 31st of March each year.

# SOLID WASTE

## INTERPRETATON OF TERMS

#### (Dec. 38/2015/NĐ-CP - Art. 3, Items 1, 2, 3, 4; Dec.40/2019/ND-CP - Art.3 clause 1; Dec. 80/2014/NĐ-CP - Art. 2, Clause 21)

###### ***Solid waste*** means waste in solid or viscous form (also called sludge) discharged from production, business, service, daily life or other activities.

###### ***Ordinary waste*** means waste that is not on the list of hazardous waste or in the list of hazardous waste but with hazardous elements below the hazardous waste threshold.

###### ***Household solid waste*** (also called household garbage) means the solid waste generated from daily-life activities of humans.

###### ***Industrial solid waste*** means solid waste generated from production, trading and services, including hazardous solid waste and ordinary industrial solid waste.

###### ***Sludge*** means organic or inorganic mud dredged and collected from septic tanks, rainwater and wastewater-collecting and -conducting systems, retention reservoirs, channels, rainwater intake ports and chambers, rainwater and wastewater pumping stations, discharge gates and wastewater treatment plants.

## HOUSEHOLD SOLID WASTE

#### (Dec. 38/2015/NĐ-CP - Art. 15, Clause 1,2,3; Art. 16, Clause 1,2,3; Art. 17, Clause 1,3; Dec.40/2019/ND-CP Art.3 clause 4, 6, Appendix IV)

Responsibilities of household solid waste generators:

###### Classify wastes at their source into the following groups:

1. Biodegradable (food leftovers, leaves, vegetable, fruit, animal carcasses);
2. Reusable and recyclable wastes (paper, plastic, metal, rubber, plastic, glass);
3. Others.

###### Store wastes in the appropriate packaging or storage device.

###### Generators of domestic solid waste (except for households and individuals) shall transfer domestic solid waste to the following entities:

1. Facilities having functions suitable for reuse, recycling, cotreatment and treatment;
2. Collectors/transporters of domestic solid waste meeting conditions prescribed in Article 18; organizations in charge of public services of collection and transport of domestic solid waste authorized by competent authorities;
3. Collectors/transporters of domestic solid waste authorized by the local governments to collect and transport of domestic solid waste to the facilities prescribed in Point a hereof.

###### If a generator of domestic solid waste conducts reuse, pre-processing, recycling, treatment, co-treatment of waste, recovery of energy from waste by themselves, the following requirements must be satisfied:

1. In accordance with the decision on approval for EIA report, approved environmental protection plan or equivalent documents;
2. The generator of domestic solid waste shall use technology, environment protection works, and manufacturing equipment available at the facility premises and meet environment protection requirements (except for domestic solid waste of biodegradable organic waste generated from offshore oil exploration and extraction facilities).

###### Pay a sanitary fee for the collection and transportation of household solid waste as prescribed.

###### Sign collection, transportation and disposal service contracts and pay all expenses under the service contract.

###### Use the transfer note of domestic solid waste for every transfer prescribed in Appendix IV Section III issued hereof.

###### Prepare following reports:

1. Annual reports on management of domestic solid waste (reporting period from January 01 to December 31) using form No. 01 Appendix V Section III issued herewith and send them to DONRE and the People’s Committee of district where the collection and transport of domestic solid waste have been conducted before January 31 of the following year;
2. Irregular reports on collection and transport of domestic solid waste at the request of competent regulatory bodies.

## ORDINARY INDUSTRIAL SOLID WASTE

### Ordinary Industrial solid waste classification

#### (2015 Law on Environmental Protection - Art. 95, Art. 96, Clause 1, Art. 97; Dec.38/2015/NĐ-CP, Art. 29, Clause 1,2; Art. 30, Clause 1,2,3; Art. 31, Clause 1; Dec. 40/2019/ND-CP Art.3 clause 12)

###### Conventional industrial solid waste to be reused or recycled as production materials;

###### Solid waste used in production of building materials and ground levelling;

###### Conventional industrial solid waste to be treated by burning, burying and reconstituting at areas where mineral extraction is closed as prescribed in law on minerals and other treatment methods in accordance with relevant special law;

###### If the conventional industrial solid waste is not classified, it must be treated in accordance with item no.3 of this clause.

### Collection and transportation of ordinary industrial solid waste

#### (Dec. 40/2019/ND-CP Art.3 clause 13)

###### Classify ordinary industrial solid waste as prescribed in Clause 3 Article 29 hereof; furnish storage equipment and areas of ordinary industrial solid waste meeting technical regulations and management process as prescribed in Point A Appendix III Section III issued at Dec.40/2019.

###### **The generator of ordinary industrial solid waste shall transfer conventional industrial solid waste to one of following entities:**

1. **A facility owner permitted to use conventional industrial solid waste directly for production of building materials or ground levelling by law;**
2. **A facility owner whose waste co-treatment plan has been approved by the competent authority;**
3. **A treater of conventional industrial solid waste having appropriate functions;**
4. **A transporter of conventional industrial solid waste meeting requirements in Article 31 hereof and having transfer contracts with entities prescribed in Point a, b and Point c hereof.**

###### **Identify and separate ordinary industrial solid waste from hazardous wastes; in case of failure to separate them, they must be managed under the provisions on hazardous wastes.**

###### **The transfer note of ordinary industrial solid waste shall be used for every transfer of ordinary industrial solid waste as prescribed in Appendix IV Section III issued herewith.**

###### **A generator of ordinary industrial solid waste which conducts reuse, pre-processing, recycling, treatment, co-treatment, recovery of energy from conventional industrial solid waste by themselves must comply with technical regulations and management process as follows:**

1. **In accordance with the certificate of enterprise registration, business registration or investment certificate, investment registration and other equivalent documents as per the law;**
2. **The generator of ordinary industrial solid waste shall use technology, environment protection works, and manufacturing equipment available at the facility premises and meet environment protection requirements as prescribed. Any incineration or landfill of ordinary industrial solid waste in the premises of the generator with which to conduct treatment of ordinary industrial solid waste by themselves must be accordance with solid waste management section in relevant guidance;**
3. **In accordance with the decision on approval for EIA report, approved environmental protection plan or equivalent documents**

###### **Prepare following reports:**

1. **Annual reports on management of conventional industrial solid waste (reporting period from January 11 to December 31) using form No. 03 Appendix V Section III issued herewith and send them to Department of Natural Resources and Environment before January 31 of the following year. If the above-mentioned generator is also the generator of hazardous waste, such report on management of conventional industrial solid waste shall be combined with the report on management of hazardous waste;**
2. **Irregular reports on generation of conventional industrial solid waste at the request of competent regulatory bodie**s.

### Collection and transportation of ordinary industrial solid waste

###### **Wastes shall be collected, stored, and transported with specialized vehicles and equipment.**

###### **Collection, transport and transfer of wastes shall be carried out in such a way that wastes don’t spill, cause emission of dust, odor or leakage of liquids and must meet the prescribed technical requirements and management process.**

###### **Hazardous waste treatment owners will have the appropriate functions, equipment and capabilities for a hazardous waste treatment facility (if the facility treats ordinary industrial solid waste and hazardous waste).**

## MANAGEMENT OF SLUDGE

#### (Dec. 80/2014/NĐ-CP - Art. 25; Dec. 38/2015/NĐ-CP, Art. 40, Clause 3 Art. 53, Clause 1)

###### Sludge management shall contribute to reduce transportation and disposal costs and ensure the convenient management and operation of landfills;

###### Sludge with hazardous elements exceeding the hazardous waste threshold shall be managed according to the provisions on hazardous waste management;

###### Sludge not exceeding the hazardous waste threshold shall be managed according to the provisions on ordinary industrial solid waste management;

###### Discharge of untreated sludge into the environment is prohibited;

###### Sludge from water drainage systems (sewer network and wastewater treatment plants) shall be collected, stored and transported to the planned treatment points or licensed locations;

###### The treatment and reuse of sludge must comply with the regulations on management and use of sludge promulgated by competent State bodies and other regulations on environmental protection; technologies applied to sludge treatment include burying in soil, biogas recovery from anaerobic digestion, composting, incineration for energy, other;

###### When investing in the construction of a wastewater treatment plant, a suitable solution for collecting and treating sludge must be selected.

###### Sludge from septic tanks:

1. Shall periodically be pumped out and transported by specialized equipment meeting technical and environmental protection requirements;
2. Shall be transported to licensed places for disposal; discharge of septic tank sludge into water drainage systems or the environment is prohibited;
3. The cost of pumping, transportation and treatment of sludge from septic tanks shall be paid by households, offices and manufacturing facilities in compliance with the clauses in the contracts signed with the service providers.

# HAZARDOUS WASTE

## INTERPRETATION OF TERMS

#### (2015 Law on Environmental Protection - Art. 3, Clause 13; QCVN 07: 2009/BTNMT)

###### ***Hazardous wastes*** refer to the waste that exhibits one or more hazardous traits such as toxicity, reactivity, infectivity, ignitability, corrosivity and other poisonous characteristics.

###### ***Hazardous Waste Thresholds*** refer to the quantitative limit of hazardous property or hazardous component of a waste as the basis for identification, classification and management of hazardous waste

## RESPONSIBILITIES OF HAZARDOUS WASTE OWNER

#### (Dec. 38/2015/NĐ-CP - Art. 7)

###### The hazardous waste generating facility is to be registered with DONRE.

###### Take measures to minimize hazardous waste generation. Identify, classify and quantify the volume of hazardous waste to be reported and managed.

###### Have a temporary storage area for hazardous waste. Store hazardous waste in packaging or storage specialized containers that ensure no negative impacts on humans and the environment and meeting the technical requirements and management process as prescribed.

###### Conclude a contract to transfer hazardous waste with organizations and individuals having appropriate license in case it is not possible to reuse on-site, recycle, treat, co-treat and recover energy from hazardous waste at the facility.

###### Owner of hazardous waste source shall prepare a report every six (6) months in respect of the storage of hazardous waste at the generating facility, and send to DONRRE as a separate submission or in combination with the report on periodical hazardous waste management upon failure to transfer in the following cases:

1. Plan for feasible transport and treatment has not been made;
2. Suitable owner of hazardous waste treatment facilities has not been found.

###### Prepare, use, store and manage documents of hazardous waste, hazardous waste management report (both periodical and unexpected) and dossiers, documents and diaries relating to the hazardous waste management as prescribed.

###### Notify when writing to DONRE at the place of the hazardous waste generating facilities within six (6) months upon termination of generation of hazardous waste.

## REGISTRATION OF HAZARDOUS WASTE SOURCES OWNERS

### Process of dossier establishment and registration of waste source owners

### 

### Registration of hazardous waste

#### (Dec. 38/2015/NĐ-CP – Art 6; Cir.36/2015/TT-BTNMT - Art. 12 clause 3)

###### Hazardous waste generators shall compile a dossier of registration or register online through DONRE according to the form provided in App. 6(A) in Cir. 36/2015/TT-BTNMT.

###### The registration shall be carried out only once (no renewal or adjustment) when hazardous waste-generating activities start. The registration is only re-granted if there is a change in the names and addresses of waste generator, if the addresses and number of hazardous waste-generating establishments are changed, and if the plans on self-reuse, recycling, co-treatment and treatment, and recovery of energy from hazardous wastes at the establishments are modified and added. After being granted by the Register of Waste Generators, waste information shall be updated with periodic reports on hazardous waste management.

###### The registration procedures for the hazardous waste source owner shall be integrated into the registration of plans: self-reuse or pre-processing, recycling, treatment, co-treatment, recovery of energy from hazardous wastes up to the environment-related technical regulations within the premises of the generating establishments.

###### The following entities are not required to register as hazardous waste generator, but only to submit periodic reports on hazardous waste management according to the form provided in App. 4(A) in Cir. 36/2015/TT-BTNMT:

1. Facilities that have operated for less than one year.
2. Facilities whose regular or annual production of hazardous wastes do not exceed 600 kg per year, except for hazardous wastes on the list of persistent organic pollutants (POP) in Stockholm Convention.

## CLASSIFICATION, COLLECTION, AND STORAGE HAZARDOUS WASTE

#### (2015 Law on Environment protect, Art. 91; Dec. 38/2015/NĐ-CP, Art. 5; Cir. 36/2015/TT-BTNMT, Art.6)

### Classification, collection, and storage of hazardous waste

#### (Dec. 38/2015/NĐ-CP, Art. 6)

###### Every entity that generates hazardous wastes must collect, store, and process it in accordance with environmental standards. If the entity that generates wastes does not have the facilities to process hazardous wastes in accordance with environmental standards, wastes generated have to be transferred to an entity that is licensed to process hazardous wastes.

###### Wastes must be kept in specialized containers that ensure no negative impacts on humans and the environment.

### Identification, encoding, classification and storage of hazardous waste

#### (Dec. 38/2015/NĐ-CP - Art. 5; Cir.36/2015/TT-BTNMT - Art. 6)

###### The identification must be carried out under codes, categories and levels of hazardous waste.

###### Classification must be according to the code of hazardous waste to be stored in packaging or appropriate storage instruments. It is permitted to use the same packaging or storage instruments for hazardous waste code of the same nature, being not likely to cause reactions, interact with each other and having the ability to be treated in the same method.

###### Hazardous wastewater treated to environmental standards in wastewater treatment system at the generating facility shall be managed under the provisions of wastewater management.

###### Hazardous wastes must be classified from the time they are stored or transferred for treatment.

###### Hazardous wastes shall be identified according to Appendix 1 of Cir. 36/2015/TT-BTNMT and environmental standards on limits of hazardous wastes (QCVN 07:2009/BTNMT).

###### Hazardous wastes must be classified by the source owner when:

1. Wastes are moved to storage at the same establishment where they were produced;
2. Wastes are moved an external establishment for treatment other than storage of the establishment where they were produced.

###### In case wastes are reused, recycled, treated, or used for energy production at the generating facility; the source owner may decide whether to classify them depending on available technologies.

## TECHNICAL REQUIREMENTS AND PROCEDURES FOR HAZARDOUS WASTE

#### (Cir. 36/2015/TT-BTNMT - Art. 7; App. 2A. 4A)

Waste owners shall fulfill the duties prescribed in Article 7 of Decree 38/2015/ND-CP with regards to the technical requirements and procedures prescribed as stated from numbers one to eight below.

###### Prepare an area for storage of hazardous wastes; store hazardous wastes in packages or storing devices that satisfy technical requirements and management procedures in Appendix 2 (A) enclosed Cir. 36/2015/BTNMT

###### Requirements for transfer of hazardous wastes:

1. For transferring hazardous waste outside the establishments, contract must be signed by entities having legitimate licenses for hazardous waste treatment or management.
2. When exporting hazardous wastes for treatment overseas, the source owner must comply with the Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes.

###### Use hazardous waste documents upon each delivery of hazardous wastes as provided in Appendix 3 of the Circular 36/2015/BTNMT, except in cases of reuse, treatment, recycling of hazardous wastes within the premises of the facility.

###### Within six (6) months from the transfer date, if the last two copies of the documents are not received without acceptable explanation in writing from the transferee, the hazardous waste source owner shall send a report to DONRE of the province or Vietnam Environment Administration.

###### Making and submitting reports:

1. Make annual reports on hazardous waste management (the reporting period is from January 1 to December 31) using the form provided in Appendix 4 (A) enclosed the Cir. 36/2015/BTNMT, and submit them to DONRE by January 31 of the succeeding year. In the case incurred hazardous waste for a period of not more than 01 (one) year, the hazardous waste source owner shall only submit one report within one month from the day on which the facility is shut down.
2. Submit extraordinary reports at the request of competent authorities.

###### Retain all copies of hazardous waste documents, reports on hazardous waste management, and relevant documents for five (5) years in order to provide them for competent authorities upon request.

###### Make paper documents simultaneously with online reports on the system of Vietnam Environment Administration or via email at the written request of competent authorities.

###### The reuse, recycle, treatment of hazardous wastes, or use of hazardous wastes for energy production must satisfy the technical requirements and procedures in Appendix 2 (A) enclosed the Cir. 36/2015/BTNMT and be registered in the register of hazardous waste source owners.

## NATIONAL TECHNICAL REGULATIONS

The applicable national technical regulations are listed below:

|  |  |  |
| --- | --- | --- |
| **No** | **Regulation** | **Note** |
| 1 | QCVN 07:2009/BTNMT | Threshold of hazardous waste |
| 2 | QCVN 50:2013/BTNMT | National technical regulation on hazard threshold for sludge from water treatment |
| 3 | TCVN 6707 : 2009 | Hazardous waste regulation - warning and prevention sign |
| 4 | TCVN 6706 : 2009 | Hazardous waste - Classification |

# AIR EMISSIONS

## INTERPRETATION OF TERMS

#### (Dec. 38/2015/NĐ-CP - Art. 3, Clause 8; QCVN 19:2009 )

###### ***Industrial emission*** means waste existing in a gas or steam state generated from industrial production and services.

###### ***Dust*** is a fine dispersion in which dispersion medium is gas phase and dispersed phase is solid particles larger than 75 μm in diameter.

## MANAGEMENT OF AIR EMISSIONS

#### (2015 Law on Environmental Protection, Art. 102)

###### Any entity that produces dust and/or exhaust gases during their business operation shall take measures to control and treat dust/exhaust gases in accordance with environmental standards.

###### Vehicles, machinery, equipment, constructions that produce dust and/or exhaust gases must have filters, covers, or other parts to minimize exhaust gases and reduce dust in accordance with environmental standards.

###### Dust and exhaust gases that contain hazardous elements beyond the permissible limits shall be managed in accordance with regulations on hazardous wastes.

## CONTROL OF DUST AND EXHAUST GASES

### Point sources of air emissions

#### (Dec. 38/2015/NĐ-CP, Annex; Cir. 31/2016/TT-BTNMTC- Art. 19, Clause 2 / Dec. 40/2019/ND-CP Art.3 clause 23 App. I Section III)

Establishments generating emissions shall:

###### Install emission treatment system that meets regulatory environmental technical standards with provision of safe sampling location;

###### Keep an operational logbook of the emission treatment system which is fully compiled and retained for a period of at least two years. The operational logbook must be written in Vietnamese language, and must include the following details: flow volume, operational parameters, and amount of water and chemicals used (applicable for establishments that are equivalent subjected to EIA).

###### Carrying out periodical monitoring of exhaust gases in accordance with the general regulations:

1. Ongoing projects having scale and capacity equivalent to the projects subject to EIA report and total volume of emissions discharged to environment is 5,000m3/hour or higher (according to the total design capacity of emission treatment systems or the flow of emissions approved in the EIA report and equivalent documents) shall perform regular wastewater monitoring every 3 months. one time / three months: applicable for establishments that are equivalent subjected to EIA.
2. Ongoing projects having scale and capacity equivalent to the projects/plans subject to registration of environment protection plan and total flow of emissions discharged to environment is 5,000m3/hour or higher (according to the total design capacity of emission treatment systems or the flow of emissions registered in the environmental protection plan) shall perform regular wastewater monitoring every 6 months.

*(If technical regulations on environment or regulations on environmental monitoring techniques promulgated by the MONRE stipulate monitoring frequency of certain particular environment pollution parameters by sectors, such regulations shall prevail)*

1. Encourage facilities not prescribed in Points a and Point b of this Clause to perform regular emission monitoring as the basis for assessment of conformity with technical regulations on environment; if the emission exceeds technical regulations on environment, it is required to check the emission treatment system or renovate, upgrade emission treatment works meeting technical regulations on environment before releasing emission to environment.

*(However, periodic monitoring is usually carried out according to the approved environmental impact assessment report the environmental protection plan has confirmed).*

###### The automatic and continuous emission monitoring shall be carried out in the following cases:

1. In a case where a project is under construction phase, it must install the automatic and continuous emission monitoring system before it is put into operation.
2. Encourage facilities not specified above to install an automatic and continuous emission monitoring system to supervise and propose environment improvement solutions to their emission treatment system. These facilities are exempt from regular emission monitoring programs as per the law.

### Workplace indoor air quality

#### (Law on occupational safety and hygiene - Art. 16, Clause 1,4)

###### The workplace is required to meet requirements pertaining to space, ventilation, dust, toxic vapor/gases, radioactivity, electromagnetic fields, heat, humidity, dangerous elements, and other harmful elements;

###### Annually or when necessary, dangerous or harmful factors at the workplace must be inspected and assessed to carry out technical measures for the elimination or reduction in dangerous or harmful factors at the workplace, and for the improvement of working condition and healthcare for employees.

## REGISTRATION AND LICENSING OF INDUSTRIAL GASES GENERATORS

#### (Dec. 38/2015/NĐ-CP, Annex; Cir. 31/2016/TT-BTNMT Art. 26, Clause 2, Appendix 11; Dec.40/2019/ND-CP Art. 3 clause 21, 2)

Registration on Industrial Emission Generator:

###### Projects and facilities listed as voluminous exhaust gas sources specified in Appendix of Dec. 38/2015/NĐ-CP (i.e. industrial boiler with output above 20 tons steam/hour - multiple boilers that produce more than 20 tons of combined steam per hour) must register as industrial emission generators.

###### MONRE shall consider the applications for industrial exhaust gas generator registration and grant permits for the discharge of industrial exhaust gases to operating establishments listed as voluminous exhaust gas sources.

###### A project or facility which generates industrial emission and is subject to inspection and certification of completion of environment protection works prescribed in Clause 1 Article 17 and Clause 3 Article 22 Dec. 18/2015/ND-CP must establish and manage their database on industrial emission. A database on industrial emission comprises data on measurement, statistics, inventories of flow, parameters, characteristics of industrial emission. The project or facility shall include performance of these matters on completion of environment protection works, and within the annual report on environment protection.

Issuing license for industrial emission:

###### A project or facility which generates industrial emissions and is subject to inspection and certification of completion of environment protection works must obtain a license for industrial emission. The content of licensing industrial emission shall be included in the environment protection works, certificate of eligibility for environment protection in import of scrap as production materials or license for hazardous waste treatment as per the law

###### Validity of the license shall be 05 (five) years. Where there is a change in emission sources (increase in the volume and number of exhaust gas emission sources), establishments must apply for a new license.

###### License issuance shall be effective from January 1, 2018.

###### The results of regular emission monitoring, automatic and continuous emission monitoring shall be used as the basis for issuing licenses for industrial emissions

## AUTOMATIC AND CONTINOUS MONITORING OF INDUSTRIAL AIR EMISSION

#### (Dec. 38/2015/NĐ-CP, - Art. 45, Clause 1,2, Art. 46, Appendix; Dec 40/2019/ND-CP Art.3 clause 23)

###### Projects and facilities listed as voluminous exhaust gas sources must install continuous automatic air emission monitoring systems and transmit data directly to DONRE.

###### Automatic and continuous emission monitoring parameters include:

###### Fixed environmental parameters include: flow, temperature, pressure, surplus O2, total suspended particles, SO2, NOx and CO (unless a technical regulations on environment in a special sector requires no control);

###### Particular environmental parameters by sectors referred to in the report and decision on approval for EIA report or certified environmental protection plan.

###### Parameters to be monitored for boilers with output above 20 tonnes of steam/hour are: flow volume, total particulate matter (TPM), temperature, SO2, NOx (calculated according to NO2), O2 (the steam boilers fuelled by natural gases, CNG and LPG are not subject to automatic continuous emissions monitoring).

###### The continuous emissions monitoring system must operate in a stable manner, be inspected and calibrated as prescribed, and be ensured that it conforms to the technical requirements concerning data connection to transmit data directly to DONRE. Automatic and continuous emission monitoring system with CCTV must undergo testing, survey, and calibration as per the law on science and technology, standards, metrology and quality. Depositing, reporting, and disclosure of information and data obtained through the environmental monitoring process (refer section 5.14).

## NATIONAL TECHNICAL REGULATIONS ON DUST AND INDUSTRIAL AIR EMISSION

#### (Cir 25/2009/TT-BTNMT, Cir 41/2010/TT-BTNMT; Decision 3733/2002/QĐ-BYT; Cir 26/2016/TT-BYT)

The applicable national technical regulations are listed below:

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Source of emission** | **Applicable standards** | **Common monitoring parameters for the Garment Industry** |
| ***1.*** | ***Regulation on point sources of air emissions (applicable for point sources of air emissions)*** | | |
| 1.1 | Stack emissions from combustion units (e.g. boilers) | QCVN19:2009/BTNMT (National Technical Regulation on Industrial Emission of Inorganic Substances and Dusts) | Total particulate matter (TPM), CO, SO2, NOx (calculated according to NO2) |
| 1.2 | Vent emissions from high temperature ovens (e.g. textile coating, drying and curing). | QCVN 20:2009/BTNMT  (National Technical Regulation on Industrial Emission of Organic Substances) | VOCs and some typical solvents contained in the chemicals used. |
| 1.3 | Stack emissions from waste incinerator (energy recovery of industrial waste) | QCVN 30:2012/BTNMT  (National Technical Regulation on Industrial Waste Incinerator) | Temperature, Excess Oxygen,  Total particulate matter (TPM), CO, SO2, NO2,  Dioxin/Furan |
| ***2.*** | ***Regulation on workplace indoor air quality (applicable for Workplace indoor air quality)*** | | |
| 2.1 | Heat, moisture from the ironing process | QCVN:26/2016/BYT National Technical Regulation on Microclimate - Permissible Value of Microclimate in the Workplace | * Air temperature (°C) * Humidity (%) * Air velocity (m/s) |
| 2.2 | Cotton dust generated in cotton handling and fabric manufacturing areas | QCVN 02/:2019 /BYT National Technical Regulation on Dust - Permissible Exposure Limit Value of Dust at the Workplace | Cotton dust |
| 2.3 | Volatile organic compounds (VOCs) and inorganic substances from chemical warehouse, dyeing, drying, finishing workshops | XXI. CHEMICALS – ACCEPTABLE LIMITS IN THE WORKING AIR  (Decision 3733/2002/QĐ-BYT) | Depending on the chemicals used, some pollutants can be generated,  such as VOCs, Formaldehyde (HCHO), Chlorine (Cl2), Ammonia (NH3), Hydrogen Sulphide (H2S), Carbon Disulphide (CS2) maybe emitted |

# NOISE AND VIBRATION

## MANAGEMENT AND CONTROL OF NOISE AND VIBRATION

#### (2015 Law on Environmental Protection - Art. 103, Clause 1, 2.; Cir. 31/2016/TT-BTNMT, Art. 19, Clause 3)

###### Any entity that creates noise and vibration must take measures to control them in accordance with environmental standards.

###### Facilities in residential areas that create noise must take measures to minimize them to avoid affecting the local community.

###### Establishments in an industrial cluster must exercise responsibility for management of noise and vibration, and install and invest in the system for reducing noise and vibration that meet regulatory environmental and technical standards and other relevant regulations.

## NATIONAL TECHNICAL REGULATIONS ON NOISE, VIBRATION

#### (Cir. 39/2010/TT-BTNMT **)**

The applicable national technical regulations are listed below:

|  |  |  |
| --- | --- | --- |
| **No.** | **Regulation** | **Note** |
| ***1.*** | ***Outside of Factory*** | |
| 1.1 | QCVN 26:2010/BTNMT | National Technical Regulation on Noise |
| 1.2 | QCVN 27:2010/BTNMT | National Technical Regulation on Vibration |
| ***2.*** | ***Inside of Factory*** | |
| 2.1 | QCVN 24:2016/BYT | National Technical Regulation on Noise – Permissible Exposure Levels of Noise in the Workplace |
| 2.2 | QCVN 27:2016/BYT | National Technical Regulation on Vibration – Permissible Levels of Vibration in the Workplace |

# ENERGY MANAGEMENT

## INTERPRETATION OF TERMS

#### (Law on Economical and Efficient Use of Energy - Art. 9, Clauses: 1, 4, 5, 9)

###### ***Energy*** includes fuel, electric and thermal energy attained through the processing of non-renewable and renewable energy resources.

###### ***Fuel*** means forms of substances directly used or processed to produce heat or power.

###### ***Economical and efficient use******of energy*** means the application of managerial and technical measures to reduce energy loss and consumption in devices and equipment while meeting demands and requirements of production and life.

###### ***Energy yield*** means the indicator showing the device or equipment's capacity to convert used energy into useful energy.

## RESPONSIBILITIES

#### (Law on Economical and Efficient Use of Energy - Art. 9, Clause 2)

###### Elaborate and implement annual plans on economical and efficient use of energy; incorporate energy management programs with their programs on quality control, cleaner production and environmental protection;

###### Apply standards, technical regulations and norms on energy use provided by competent state agencies; select and apply advanced production management processes and models, appropriate technological measures and equipment and technologies with high energy yield: use substitute energies with higher efficiency in production lines;

###### Apply technical measures and workshop architecture to make the optimal use of lighting, ventilation and cooling systems, to make the best use of natural light and ventilation;

###### To operate, upgrade and maintain devices and equipment of production lines so as to prevent energy loss;

###### To gradually eliminate devices and equipment that are outdated and energy-intensive technologies under the Prime Minister's regulations

## MEASURES FOR ECONOMICAL AND EFFICIENT USE IN INDUSTRIES

### General Regulations

#### (Law on Economical and Efficient Use of Energy, Art. 10)

Producers, processors and sub-contract producers of products and goods shall, based on standards, technical regulations and norms on energy use, select and apply the following technological and managerial measures:

###### Modernizing lines for production, processing and subcontract production of goods; replacing equipment with outdated technologies and low energy yield to save energy and protect the environment;

###### Improving and streamlining the processes of:

1. Burning fuels in steam boilers;
2. Heat exchange in heat and cold intensifiers;
3. Converting thermal into electric energy, electric into thermal and mechanical energy, and other forms of energy conversion;

###### Making use of waste heat emitted from steam boilers and waste steam from production processes;

###### Taking technical measures to reduce energy loss in electrical and heat supply systems:

###### Using electric motors, steam boilers and pumps with high yield, inverters and motor speed controllers for installation, construction, replacement and repair of works;

###### Applying cogeneration technologies to develop additional electric and thermal charges.

### Measures Proposed for Economical and Efficient Use of Energy in Industries

#### (Cir. 02/2014/TT-BCT, Art. 4 -24 App II)

The measures proposed for Economical and Efficient use of energy in industries vide the Circular No 02/2014/TT-BCT are listed below:

|  |  |  |
| --- | --- | --- |
| **No** | **Regulation** | **Measures for Economical and Efficient Use of Energy in Industries** |
| 1 | General requirements | Article 4. Energy efficiency |
| Article 5. Management of economical and efficient use of energy in general processes |
| 2 | Combustion processes | Article 6. General requirements |
| Article 7. Solutions for economical and efficient use of energy in combustion processes |
| Article 8. Selection of appropriate heating equipment and fuels |
| 3 | Heat supply system and cooling system | Article 9. Requirements and solutions for heat supply system |
| Article 10. Requirements pertaining to other heat supply system |
| Article 11. Requirements pertaining to cooling system |
| Article 12. Solutions for economical and efficient use of energy in cooling system |
| 4 | System of combustion, heat supply and heat transfer | Article 13. General requirements |
| Article 14. Solutions for making use of heat waste |
| 5 | Air conditioning system and hot water supply | Article 15. General requirements |
| Article 16. Solutions for economical and efficient use of energy in system of heat water supply |
| 6 | Power loss protection | Article 17. General requirements |
| Article 18. Solutions for reducing power losses in the system |
| 7 | Electrical engines | Article 19. General requirements |
| Article 20. Solutions for economical and efficient use of energy in engines |
| 8 | Lighting | Article 21. General requirements |
| Article 22. Solutions for economical and efficient use of energy in lighting system |
| 9 | Compressed air system | Article 23. Requirements for efficient operation applicable to compressed air system |
| Article 24. Solutions for economical and efficient use of energy in compressed air system |

### Specific energy consumption and improvements in energy efficiency

#### (Cir. 02/2014/TT-BCT - Art. 25 App III)

###### Specific energy consumption (SEC) shall be determined according to the procedures prescribed.

###### SEC shall be determined according to a unit of typical products of an industry (metric tons of products, units of products, etc.). In case the industrial producer has various types of output products, they shall be converted to a typical product.

###### The SEC of the producer shall be compared with the rated energy consumption (or average energy consumption of the industry) to decide the scope of improvement in energy efficiency.

###### The scope of improvement in energy efficiency shall be prescribed according to the industry, technology level, production scale and production features of the industrial producer. The proposed scope of improvement shall be prescribed according to plan stages.

## IDENTIFICATION OF MAJOR ENERGY USERS

#### (Dec. 21/2011/NĐ-CP, Art. 6, Clause 1; Cir. 02/2014/TT-BCT, App. 1)

Industrial production establishments, which annually consume energy of a total of one thousand tons of oil equivalent (1,000 TOE) or higher, are considered **major energy users**.

*Issued together with Circular No. 02/2014 / TT-BCT dated January 16, 2014 of the Minister of Industry and Trade*

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Type of energy** | **Unit** | **TOE\* / Unit** |
| 1 | Electricity | kWh | 0. 0001543 |
| 2 | Coke | tone | 0. 70 – 0. 75 |
| 3 | Coal dust type 1, 2 | tone | 0. 7 |
| 4 | Coal dust type 3, 4 | tone | 0. 6 |
| 5 | Coal dust type 5, 6 | tone | 0. 5 |
| 6 | Diesel Oil | tone | 1. 02 |
|  |  | 1000 Lit | 0. 88 |
| 7 | Fuel Oil | tone | 0. 99 |
|  |  | 1000 Lit | 0. 94 |
| 8 | LPG | tone | 1. 09 |
| 9 | Natural Gas | Tr. m3 | 900 |
| 10 | Gasoline | tone | 1. 05 |
|  |  | 1000 L | 0. 83 |
| 11 | Jet Fuel | tone | 1. 05 |

*(\*)Note: TOE – tons of oil equivalents - Conversion kOE: 1 kOE= 10-3 TO*

For example: Company A consumes energy as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Type of energy** | **Unit** | **Consumes** | **TOE\* / Unit** | **TOE** |
| 1 | Electricity | kWh | 870,000 | 0.0001543 | 134,241 |
| 2 | Coal dust type 4 | Tone | 650 | 0.6 | 390 |
| 3 | Diesel Oil | 1000 L | 400 | 0.88 | 352 |
| 4 | LPG | Tone | 120 | 1.09 | 130.8 |
|  | ***Total*** |  |  |  | ***1,007.041*** |

***Conclusion:*** Company A consumes a total energy > 1,000 TOE. Thus, Company A is a Major Energy User.

## ENERGY MANAGEMENT MODEL

(Dec. 21/2011/NĐ-CP - Art. 8)

Major energy users shall apply energy management models with the following principal contents:

**Major energy users shall apply energy management models**

**2.** Annual and five-year planning

**3.** Availability of a network and energy managers

4. Regular check and monitoring of energy consumption

**5.** Energy audit

**1**. Announcement of objectives and policies on efficient energy use

**6.** Regular training and retraining on efficient energy use

**7**. Adoption of reward and discipline

###### Announcement of objectives and policies on economical and efficient use of energy in their establishments.

###### Annual and five-year planning on economical and efficient use of energy in their establishments; formulation and application of measures for economical and efficient use of energy according to their set objectives, policies and planning; with definition of responsibilities to implement plans.

###### Availability of network and energy managers as provided by Law on Economical and Efficient Use of Energy, Art. 35, Clause 1 (*Refer section 11.8 in this Guide*).

###### Regular check and monitoring of energy consumption demands of devices and equipment of entire production chains, and the installation, upgrading and repair of energy-consuming equipment of their establishments.

###### Energy audit; proposal and selection of managerial and technological solutions for economical and efficient use of energy.

###### Regular training and retraining in economical and efficient use of energy for employees.

###### Adoption of reward and discipline regimes to promote economical and efficient use of energy in their establishments.

## RESPONSIBILITIES OF MAJOR ENERGY USERS

#### (Law on Economical and Efficient Use of Energy, Art. 33, Clause 1)

In addition to complying with this Law on Economical and Efficient Use of Energy applicable to relevant operation domains, **major energy users** shall:

###### Elaborate and implement annual and five-year plans on economical and efficient use of energy in line with their production and business plans, and report to competent local state agencies on the implementation of these plans;

###### Work out regimes on responsibilities of collectives and individuals involved in the implementation of plans on economical and efficient use of energy;

###### Appoint energy managers as per the *Law on Economical and Efficient Use of Energy* (*Refer section 10.8 in this Guide*);

###### Once every three years, conduct compulsory energy audit;

###### Apply energy management models under competent state agencies' guidance;

Observe regulations on economical and efficient use of energy in the construction, upgrading and expansion of establishments.

## PLANNING ON ECONOMICAL AND EFFICIENT USE OF ENERGY

#### (Dec. 21/2011/NĐ-CP - Art. 10, Clause 1, 2; Cir. 25/2020/TT-BCT, Art. 7,8)

###### **Major energy users** shall adopt Annual and Five-year Plans on economical and efficient use of energy;

###### Annual and Five-year Plans should cover the following principal parts:

1. Evaluation of implementation of the plan of the previous year or the previous five (5) years, respectively,
2. Planning on economical and efficient use of energy for the planning year or the next five (5) years, respectively.

*Providing for elaboration of plans, report on implementation of plan on Economical and Efficient use of energy use is regulated vide Cir. 25/2020/TT-BCT.*

## CONDITIONS AND TASKS FOR ENERGY MANAGERS OF MAJOR ENERGY USERS

#### (Law on Economical and Efficient Use of Energy - Art. 34, Clause 1, 2, 3)

###### Energy managers must meet the following conditions:

1. Holding a college or higher degree in energy or a relevant technical discipline for major energy users in industrial production
2. Possessing an energy management certificate granted by a competent agency

###### Shall assist the head of a major energy user in performing the following tasks:

1. Elaborating annual and five-year plans on economical and efficient use of energy
2. Organizing energy use management networks, applying energy management models
3. Taking measures for economical and efficient use of energy under approved objectives and plans
4. Examining and evaluating the application of measures for economical and efficient use of energy
5. Monitoring energy consumption of equipment and the entire production line; changes in energy consumption demands related to the installation, upgrading and repair of energy-consuming equipment; making regular reports under regulations
6. Organizing information sharing and training in energy use.

## ENERGY AUDIT

### Energy audit for Major energy users

(Law on Economical and Efficient Use of Energy - Art. 35, Clause 1, 2)

###### **Major energy users** shall observe energy audit regulations by conducting audit themselves or by hiring an energy audit institution.

###### An energy audit institution must meet the following conditions:

1. Being a legal entity established under law
2. Having energy auditors possessing energy auditor certificates
3. Having technical devices and equipment for energy audit

A major energy user may conduct energy audit itself when fully meeting the conditions specified at Points b and c, mentioned above.

### Energy audit

#### (Cir25/2020/TT-BCT Art. 14 )

Energy audit covers the following principal jobs:

1. Surveying, measurement and collection of data on energy use by establishments;
2. Analysis, calculation and evaluation of energy use efficiency;
3. Assessment of energy saving potential;
4. Proposal of measures for energy saving;
5. Analysis of investment effectiveness of proposed energy saving solutions.

Major energy users shall submit energy audit reports to provincial-level Industry and Trade Departments within 30 days after conducting energy audit.

### 

### Implementation of energy audit

#### (Cir. 25/2020/TT-BCT Art. 13)

###### To conduct preliminary survey to detect and propose opportunities for energy-saving without investment or only with small investment

###### Result of energy audit is a report on energy audit submitted to leaders of establishments subject to energy audit, including full figures of survey, measures, specific calculations, description of technologies, energy use of establishments and solutions for energy-saving that are proposed with prioritization, with full analysis on expenses, benefits of each proposal to facilitate establishments to select implementable measures

###### Steps to implement energy audit and contents of report on energy audit specified in Annex IV promulgated together with the Circular 09/2012/TT-BCT.

### Energy audit and reporting on energy use at establishments outside the list of major energy users

#### (Cir. 09/2012/TT-BCT - Art. 10, Clause 1-3)

Establishments outside the list of major energy users are encouraged to periodically (three years or five years) conduct energy audit and report on their energy use and identify opportunities for energy-saving.

## INSPECTION OF ECONOMICAL AND EFFICIENT USE OF ENERGY

#### (Dec. 21/2012/TT-BCT - Art. 32)

Entities subject to inspection of economical and efficient use of energy have the following rights and obligations:

###### Provide inspection-related documents to inspection teams and inspectors.

###### Create conditions for inspection teams and inspectors to perform their tasks.

###### Observe handling decisions of inspection teams and inspectors.

###### Perform other rights and obligations under the inspection law.

## PROHIBITED ACTS

#### (Law on Economical and Efficient Use of Energy, Art. 8)

###### Destroying national energy resources.

###### Making forgeries or committing frauds to enjoy state incentives for economical and efficient use of energy.

###### Taking advantage of positions and powers in the management of economical and efficient use of energy for self-seeking purposes.

###### Intentionally providing untruthful information on the energy yield of devices and equipment in energy labeling, inspection, advertising and other activities, which harm the interests of the State and the lawful rights and interests of organizations, households and individuals.

## SANCTION AGAINST ADMINISTRATIVE VIOLATION

### Regulations on sanction against administrative violation

#### (Dec. 134/2013/NĐ-CP)

The sanctions on violation are provided in Decree No.: 134/2013/ND-CP and states the forms of sanctions, remedial measures for the various types of violation of regulations

### Handling violations of economical and efficient use of energy

#### (Dec 134/2013/NĐ-CP, Article 19, 21, 22, 29)

###### Violation by key energy using facilities on energy audit

1. A caution shall be imposed on the acts of failing to completely carry out the contents of audit report under the prescribed forms;
2. A fine of between 50,000,000 dong and 60,000,000 dong shall be imposed on the acts of failing to conduct the energy audit under regulation.

###### Violation of regulation on energy audit

1. A fine between 10,000,000 dong and 15,000,000 dong shall be imposed on using fake auditor certificate;
2. A fine between 15,000,000 dong and 30,000,000 dong shall be imposed on the key energy-using facilities for one of the acts of self-performance of energy audit or leasing of audit organization for performance of energy audit when there is no contingent of energy auditors who are issued with the energy auditor certificate; no appropriate technical means and equipment for the energy audit.
3. A fine between 30,000,000 dong and 40,000,000 dong shall be imposed on the acts of intentionally falsifying the energy audit report.

###### Violation of regulation on thrifty and effective use of energy in industrial production

###### A fine of between 20,000,000 dong and 30,000,000 dong shall be imposed on the acts of failing to perform technical regulations and management measures and required technology to use energy thriftily and effectively.

###### Violation of regulation on application of energy management model

1. A caution shall be imposed on the head of the key energy using facilities for failing to fully comply with the contents of energy management model.
2. A fine between 5,000,000 dong and 10,000,000 dong shall be imposed on the acts of failing to appoint or appointing ineligible energy manager;

A fine between 10,000,000 dong and 20,000,000 dong shall be imposed on the acts of failing to formulate the plan for thrifty and effective use of energy for every year and five years; acts of failing to comply with the regulation on prescribed reporting and report on the implementation result of annual and five year plan.

# RESPONSES TO CLIMATE CHANGE

## INTERPRETATION OF TERMS

#### (2015 Law on Environmental Protection - Art. 3, Clauses: 25, 26)

###### ***Greenhouse gas***refers to a gas in an atmosphere causing the global warming and climate change.

###### ***Response to climate* change**refers to actions that human beings may take to adapt to and mitigate the climate change.

## RESPONSE TO CLIMATE CHANGE

#### (2015 Law on Environmental Protection - Article 39 clause 1,2; Article 47, clause 2)

###### All activities relating to the environmental protection must be harmoniously connected with the response to climate change.

###### Organizations or individuals shall be responsible to fulfill requirements for the environmental protection and response to climate change during their production, trading and service provision as stipulated in this Law and other relevant laws.

###### Agencies, organizations and manufacturing or business establishments shall be responsible for conducting or engaging in scientific and technological researches, transfer and application, with the aim of responding to the climate change.

## REDUCE GHG EMISSIONS

#### (Law on Environmental Protection, Art. 41, Clause 1a)

Taking action to reduce the harmful impact of greenhouse gases in conformity with socio-economic conditions.

# CHEMICAL HANDLING AND MANAGEMENT

## INTERPRETATION OF TERMS

#### (Law on Chemicals - Art. 4 Clauses 1, 4, 5, 6, 7, 8, 9, 10)

###### **Chemical** means an element, a compound or a mixture which is exploited or created by humans from natural or artificial raw materials.

###### **Hazardous chemical** means a chemical having one or more hazardous properties according to the classification principles of the Globally Harmonized System for Classification and Labeling of Chemicals.

###### **Toxic chemical** means a hazardous chemical having at least one of the hazardous properties defined, Clause 4 of Article 4 of Law of Chemicals

###### **New chemical** means a chemical not yet listed in the national chemical inventory or foreign chemical inventories recognized by Vietnamese competent state agencies

###### **Chemical-related activities** means investing in, producing, bottling, packaging, selling and purchasing, importing, exporting, transporting, storing, preserving, using, researching into and testing chemicals, disposing of discarded chemicals and disposing of chemical waste.

###### **Chemical incident** means the state of chemical fire, explosion, leakage or dispersion which causes or threatens to cause harm to humans, property or the environment.

###### **Serious chemical incident** means a chemical incident which causes or threatens to cause great harm to humans, property or the environment and falls beyond the controlling capacity of chemical facilities.

###### **New hazard properties** means hazardous properties which have been found but not yet recorded in safety data sheets

###### **GHS** is the abbreviation of **the Globally Harmonized System for Classification and Labeling of Chemicals**.

###### **Chemical Abstracts Service (CAS)** code of a chemical means the sole sequence of numerals assigned for each chemical under the rules of the CAS of the US Chemistry Association.

## GENERAL PROVISIONS

### Principles of chemical-related activities

#### (Law on Chemicals - Art. 5)

###### Assuring safety for humans, properties, ecosystems and the environment, and social order and safety

###### Strictly controlling chemical-related activities, especially those related to new chemicals, hazardous chemicals and chemicals restricted from trading and banned chemicals

###### Supplying sufficient, accurate and timely information on hazardous

###### properties of chemicals and necessary preventive measures

### Policy of the State for chemical-related activities

#### (Law on Chemicals - Art. 6, Clause 3)

The State encourages organizations and individuals to invest in the development of the chemical industry, apply modern technologies and eco-friendly technologies, gradually reduce the use of hazardous chemicals and replace toxic chemicals with less toxic and non-toxic chemicals in its manufacturing and usage, and encourage the 3R’s (Reuse, Reduce, and Recycle)of chemical waste.

### Responsibilities for protection of the environment and safety for the community

#### (Law on Chemicals - Art. 56)

Organizations engaged or involved in chemical-related activities shall strictly abide by the chemical safety provisions in the Law on Chemicals, the laws on environmental protection, occupational health and safety, and other relevant laws.

## RIGHTS AND OBLIGATIONS OF ORGANIZATIONS

### Rights and obligations in using chemicals for production of other products and goods

#### (Law on Chemicals - Art. 30)

###### ***Rights:*** Request suppliers of hazardous chemicals to provide adequate and accurate information on their properties and characteristics, information on their classification and labeling and their chemical safety data sheets.

###### ***Obligations:***

1. Abide by the regulations on chemical safety management;
2. Have qualified staff and trained personnel in charge of chemical safety;
3. Provide periodic training in chemical safety to their workers;
4. Provide sufficient, accurate and timely information and guidance on chemical safety to workers and managers;
5. Develop chemical incident prevention and response measures or plans as prescribed;
6. Update and store information on used chemicals as prescribed;
7. Promptly notify chemical suppliers and chemical management agencies upon detection of signs of new hazardous properties of used chemicals;
8. Abide by inspection requests of competent state management agencies in the implementation of regulations on chemical safety.

### Obligations in using hazardous chemicals for production of other products and goods

#### (Law on Chemicals - Art. 31, clause 1)

Apart from the rights and obligations defined in Article 30 of the Law on Chemicals (*Refer section 12.3.1*), organizations using hazardous chemicals shall:

###### Ensure safety conditions for humans and the environment in the process of using and storing hazardous chemicals;

###### Abide by technical regulations on the contents and quality standards of hazardous chemicals in the production of other products and goods;

###### Install a signaling system in the places where hazardous chemicals are used or stored which is suitable to the hazard of chemicals; if the chemicals have different hazardous properties, the warning signs must fully display these properties;

###### Supply sufficient, accurate and timely information and guidance on chemical safety to persons who directly handle, store or transport chemicals and persons who manage chemical production;

###### Observe legal provisions on disposal and discard of hazardous chemicals and their containers.

## GENERAL REQUIREMENTS TO ENSURE CHEMICAL SAFETY

*Since there are no separate requirements for the handling and storage of chemical, the following is cited from general requirements for safety in chemical production and trade.*

### Requirements for warehouses

#### (Dec 113/2017/NĐ-CP - Art. 4; TCVN 5507:2002 Clause 6)

###### Warehouses shall be suitable with the nature and scale of chemical storage.

###### Warehouses shall have emergency exits. The emergency exit shall be clearly marked, lighted and designed to facilitate the escape and rescue in case of an emergency.

###### Areas where storing or using hazardous chemicals must be located a safe distance from residential areas, public access areas and water sources

###### Work areas and storage areas must be fitted with mechanical ventilation systems. For oxidising, evaporating, burning and flammable substances at low temperatures, it is necessary to regularly monitor humidity and temperature.

###### Lighting systems shall meet requirements for chemical storage. Electrical equipment in workshops and warehouses storing flammable and explosive chemicals shall meet fire safety standards.

###### Floors shall be chemical proof; resistant to heavy load, with drainage and collection system

###### Chemical warehouses shall have regulations on chemical safety and warning signs corresponding to the hazards of chemicals hanged in visible places. Such signs shall display information about chemical identification numbers and warning graphics and words. If a chemical substance poses various types of hazards, its warning symbols shall specify all types of such hazards. Instruction signs specifying safety procedures shall be equipped at areas producing hazardous chemicals.

###### Warehouses shall have lightning arrester systems or and inspections carried out periodically.

###### The bunds should be built around storage tanks to prevent chemicals from exposing to the environment when a chemical emergency occurs and take preventive measures for fire and lightning.

###### Warehouses shall satisfy requirements for fire and environmental safety, occupational safety and hygiene according to regulations of relevant law.

###### Persons working in the warehouse when handling chemicals must use personal protective equipment.

###### Spoiled or expired chemicals, spilled chemicals, and other waste chemicals should be collected and kept in a defined isolated area for treatment using appropriate methods as required within current legislation, avoiding risk of pollution and/or environmental damage.”

### Requirements for packaging

#### (Dec 113/2017/NĐ-CP - Art. 5, Clause 3)

###### Containers and packages must be tight, firm and resistant to chemicals, weather and normal impacts when handling. Used packages shall be stored separately. Before filling chemicals, filling station shall check chemical packages and containers and clean the used packages to eliminate the possibility of reaction or fire when filling chemicals. Containers and packages that have been used but not reused shall be collected and disposed of in accordance with regulations of law on environmental protection;

###### Chemical containers and packages shall have labels specifying the contents prescribed in regulations on chemical labeling. Chemical labels must be stated clearly and be resistant to the effects of chemicals, weather and normal impacts when handling.

### Requirements for storage and transport

#### (Dec 113/2017/NĐ-CP - Art. 6)

###### Hazardous chemicals shall be classified and stored according to the nature of each chemical substance.   It is not allowed to store chemicals that are likely to react with each other or have different fire safety requirements in the same area.

###### Chemicals in the warehouse shall be stored according to national technical regulations and standards to ensure safety and facilitate response to chemical emergencies.

###### Chemical transport process shall be carried out under regulations on transporting dangerous goods.

### Requirements for Extraction

#### (Dec 113/2017/NĐ-CP - Art. 7, Clause 1,4)

###### Chemical extraction shall be carried out in an area where requirements for fire and environmental safety, occupational safety and hygiene are satisfied according to regulations of relevant law.

###### Employees responsible for chemical extraction shall be provided with training courses in chemical safety.

## CLASSIFICATION AND LABELING OF CHEMICALS

### Classification and labeling of chemicals

#### (Cir. 32/2017/TT-BCT - Art. 6, Annex 7)

###### Chemical importers shall classify and label chemicals, take responsibility for results of chemical classification and information shown on chemical labels.

###### Chemicals shall be classified according to rules and technical guidance of Globally Harmonized System of Classification and Labeling of Chemicals (GHS) from Rev. 2 (2007) onwards. General guidance and criteria for chemical classification of GHS are provided in Appendix No. 7 of Circular No. 32/2017/TT-BCT.

###### Chemicals shall be labeled according to the guidance provided in Appendix No. 8 of Circular No. 32/2017/TT-BCT. Chemical labels shall provide the following information:

1. Names of chemicals;
2. Identification numbers of chemicals (if any);
3. Hazard pictograms, signal words or hazard statements (if any) following GHS labeling;
4. Preventive measures (if any);
5. Quantity;
6. Composition or composition and contents;
7. Production date;
8. Expiry date (if any);
9. Names and addresses of entities responsible for chemicals;
10. Origins of chemicals;
11. Instruction on how to use and store chemicals.

###### In the cases where the size of a label is too small to contain every compulsory information, the information mentioned in Points a, i and k Clause 3 as above shall be stated on the label and the remaining information shall be specified in the package insert and shall be mentioned on the label.

### Classification of chemicals

(Dec 113/2017/NĐ-CP - Art. 23; Cir. 32/2017/TT-BCT - Appendix 7)

Chemicals shall be classified according to rules and technical guidance of GHS from Rev. 2 (2007) onwards.

***(\*) The criteria for classification are described in Appendix 7 of Circular 32/2017 / TT-BCT.***

### The warning images, warning words, risk warnings

Some the warning images, warning words, risk warnings commonly used:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Warning images | Name of the warning images | Warning words | Risk warnings |
| 1 | Description: Pictogram | Flame | Danger | Flammable gas |
| 2 | Description: Pictogram | Flame on the circle | Danger | May cause or intensify fire, oxidizer |
| 3 | Description: Pictogram | Flame | Danger | Extremely flammable liquid and vapor |
| 4 | Description: Pictogram | Exploding bomb | Danger | Heating may cause an explosion |
| 5 | Description: Pictogram | Corrosive | Warning | May be corrosive to metals |
| 6 |  | Compressed gases | Warning | Contains gas under pressure; Can explode if heated |
| 7 | Description: Pictogram | Skull and Crossbones | Danger | Death / poisoning when swallowed / inhaled / exposed |
| 8 | A picture containing text, clipart  Description automatically generated | Harmful health | Danger | May cause heritable toxicity if inhaled |

Warning images for transportation of chemicals

|  |  |  |
| --- | --- | --- |
| Pictogram  **1** | Pictogram  **2** | Pictogram  **3** |
| Flammable liquid  Flammable gas  Flammable Aerosol | Self-reactive flammable solid | Self-heating (self-burning), self-healing compound |
| Pictogram  **4** | Pictogram  **5** | Pictogram  **6** |
| Compounds when exposed to water generate flammable gas (dangerous when wet, wet) | Oxidized Air  Oxidized Liquid  Oxidized solids | Explosive type: 1.1, 1.2, 1.3 |
| Pictogram  **7** | Pictogram  **8** | Pictogram  **9** |
| Explosive type: 1.4 | Explosive type: 1.5 | Explosive type: 1.6 |
| Pictogram  **10** | Pictogram  **11** | Pictogram  **12** |
| Compressed air | Acute Toxicity (toxic): oral, skin and respiratory tract | Corrosive |
| Pictogram  **13** | Pictogram  **144** |  |
| Pollution to the aquatic environment | Organic Peroxide |  |

Black frames and drawings; background (\*). Size 10 cm x 10 cm (diagonal x diagonal)

*(\*) Figure 1: red, Figure 2: red and white stripes*

*Figure 3: half white, half red, Figure 4: dark blue*

*Figure 5: yellow, Figures 6, 7, 8, 9: orange*

*Figure 10: green Figure 11, 13: white*

*Figure 12: half white, half black, Figure 14: Half red, half yellow*

***(\*) The detail for harzard warning signs are described in Appendix 8 of Circular 32/2017 / TT-BCT***

## CHEMICAL SAFETY DATA SHEETS (CHEMICAL SDS)

### Chemical SDS

#### (Dec 113/2017/NĐ-CP - Art. 24, Clause 2, 3; Cir. 32/2017/TT-BCT - Art. 7, Annex 9)

###### Hazardous chemical producers and importers mentioned containing one or some hazardous substances with content higher or equal to the prescribed level (referenced in 12.6.3) shall make safety data sheets including information provided in Appendix No. 9 of Circular No. 32/2017 / TT-BCT before using chemicals on and take responsibility for contents of safety data sheets.

###### Hazardous chemical producers and importers shall retain safety data sheets of every hazardous chemical in their factories/stores and make sure that all entities relevant to hazardous chemicals are provided with safety data sheets of such hazardous chemicals.

###### Hazardous chemical producers and traders shall provide safety data sheets for entities engaging in chemical-related activities.

###### Safety data sheets shall be made in Vietnamese.

###### Safety data sheets includes the following:

1. Chemical and supplier identification
2. Hazards identification
3. Composition/information on ingredients
4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls/personal protection
9. Physical and chemical properties
10. Chemical stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information including information on preparation and revision of the safety data sheet

The order of the above-mentioned requirements may be changed and stated in various forms.

### Concentration limits of substances and Chemical SDS

#### (NĐ 113/2017/NĐ-CP - Art. 24, Clause 1)

Hazardous chemicals and mixtures containing one or some hazardous substances with content higher or equal to the following level shall be provided with safety data sheets:

|  |  |  |
| --- | --- | --- |
| **No.** | **Classification of chemicals** | **Content** |
| 1 | Acute toxicity | ≥ 1.0% |
| 2 | Skin corrosion/irritation | ≥ 1.0% |
| 3 | Serious eye damage/eye irritation | ≥ 1.0% |
| 4 | Skin/respiratory sensitization | ≥ 0.1% |
| 5 | Germ cell mutagenicity (Category 1) | ≥ 0.1% |
| 6 | Germ cell mutagenicity (Category 2) | ≥ 1.0% |
| 7 | Carcinogenicity | ≥ 0.1% |
| 8 | Reproductive toxicity | ≥ 0.1% |
| 9 | Specific target organ toxicity single exposure | ≥ 1.0% |
| 10 | Specific target organ toxicity repeated exposure | ≥ 1.0% |
| 11 | Aspiration toxicity (Category 1) | ≥ 1.0% |
| 12 | Aspiration toxicity (Category 2) | ≥ 1.0% |
| 13 | Aquatic toxicity | ≥ 1.0% |

## DISPOSAL OF DISCARDED CHEMICALS

#### (Law on chemicals - Art. 35, Clause 1, 2)

###### Spoiled or expired chemicals, spilled chemicals, and other waste chemicals should be collected and kept in a defined isolated area for treatment using appropriate methods as required within current legislation, avoiding risk of pollution and/or environmental damage.

###### Dispose of and discard residual chemicals and chemical wastes and containers according to the Law on Environmental Protection.

## PREVENTION, RESPONSE OF CHEMICAL INCIDENTS

### Chemical incident prevention and response

#### (Law on chemicals - Art. 36, Clause 1,2,4; Dec 113/2017/NĐ-CP - Art. 20, Clause 1,2; Art. 21, Clause 1a)

###### Abide by technical regulations on safety; and provide periodical training in chemical safety to workers.

###### Projects related to Chemicals which is on the List of Appendix IV of Decree 113/2017 / ND-CP shall elaborate chemical incident prevention and response plans and submit them to competent state management agencies for approval, and may only commence their projects after these plans are approved. In case of expanding or changing the scope of operation, they shall amend and supplement their chemical incident prevention and response plans, and submit them to competent agencies for approval.

###### Projects related to Chemicals which are not included in the list of Appendix IV of Decree 113/2017 / ND-CP shall work out chemical incident prevention and response measures suitable to the production scope and conditions and properties of chemicals.

### Responsibilities for coordination in chemical incident prevention and response

#### (Law on Chemicals - Art. 42, Clause 1, 2, 3a, 3đ)

###### Organizations engaged in chemical activities involving such chemicals as in the list of hazardous chemicals shall elaborate plans on prevention and response to chemical incidents, and provide them to People's Committees at all levels and fire prevention and fighting agencies about contents of chemical incident prevention and response plans to coordinate response to occurrence of chemical incidents; for chemical facilities located in industrial parks, export-processing zones or economic zones. They must also supply such information to the management boards of the industrial parks, export-processing zones or economic zones (refer Section 12.9).

###### Upon occurrence of chemical incidents, they shall promptly apply chemical incident prevention and response measures or plans and promptly notify the incidents to the nearest fire brigades, concerned agencies and units and local administrations for coordination in responding to and remedying chemical incidents.

###### Upon occurrence of serious chemical incidents, the responsibilities for coordination in incident response are prescribed as follows:

1. Chemical facilities shall promptly take response measures specified in number 2 above.
2. They shall abide by competent state management agencies orders on the mobilization of people and properties to respond to and remedy chemical incidents in accordance with law.

## CHEMICAL INCIDENT PREVENTION AND RESPONSE PLANS (CIPRP)

### Entities required conducting CIPRP

#### (Dec 113/2017/NĐ-CP -Art. 20, Clause 1,2Annex IV)

###### The list of hazardous chemicals along with CIPRP is provided in Appendix IV of Decree 113/2017 / ND-CP.

###### Investors of projects that involve production, trade, storage or use of chemicals containing at least one chemical mentioned in Appendix IV of Decree 113/2017 / ND-CP—with the maximum storage volume at a period of time over or equal to the volume stated in such Appendix—shall make plans for every hazardous chemical, and submit them to relevant ministries for inspection and approval before putting projects into operation.

### Contents of CIPRP

#### (Law on Chemicals - Art. 39; Dec 113/2017/NĐ-CP - Art. 20, Clause 3; Cir. 32/2017/TT-BCT - Art. 5, Clause 1 Annex 6)

CIPRP include basic contents prescribed in Article 39 of the Law on Chemicals as follows:

###### Information on properties, quantities, production technologies and use of chemicals, geographical, population and environmental conditions in the places where chemical-related activities are carried out.

###### Forecasts about incident-causing dangers and plans on inspection and supervision of sources of chemical incidents.

###### Forecasts about circumstances leading to chemical incidents and preventive measures.

###### Capacity of responding to chemical incidents, including equipment devices, manpower and plans on coordination with local forces and plans on evacuation of people and properties.

###### Plans on remedying of consequences of chemical incidents in accordance with the law on environmental protection and other relevant laws.

*Layout and contents of CIPRP are provided in Appendix No. 6 of Circular No. 32/2017 / TT-BCT.*

### Dossiers, deadlines and procedures for appraisal and approval for CIPRP

#### (Dec 113/2017/NĐ-CP - Art. 20, Clause 4,5,6; Cir. 32/2017/TT-BCT - Art. 4, Clause 3a, Annex 3)

###### Dossier for CIPRP Appraisal:

1. A completed application form as Form 03a issued in Annex 3 of Circular 32/2017 / TT-BCT.
2. Chemical incident prevention and response plans (CIPRP): nine (9) copies.

###### The time limit for inspection and approval of the plan is 22 working days from the day on which the valid application is received.

###### Procedures for inspection and approval of the plan

1. The applicant shall make one set of application and send it, by post, in person or through the online public service system, to an inspecting authority;
2. If the application is invalid, the inspecting authority shall inform the applicant of additional documents within three days from the day on which the application is received;
3. After receiving the valid application, the inspecting authority shall carry out inspections of the plan. Inspection of the plan shall be carried out through the inspection council.
4. If the plan is rejected, the applicant shall remake the plan. The application and procedures for inspection shall be carried out similarly, to that for the first time;
5. In the cases where the plan is approved or for revision, the applicant shall fulfill requirements stated in the inspection record and send a physical explanation, one soft copy and seven hard copies of the plan revised at the request of the inspection council to the inspecting authority;
6. After receiving the request from the applicant, the inspecting authority shall consider approving the plan or provide the applicant with a written explanation if the plan is rejected;
7. On the basis of the approved plan, the inspecting authority shall certify in the title page of the plan and send the decision on approval and the plan to specialized authorities, state authorities responsible for fire and environmental safety of the province; People’s Committees of districts; management unit of an industrial park, export-processing zone or economic zone if the project is located therein.

### Responsibilities of entities having approved plans (CIPRP)

#### (Dec 113/2017/NĐ-CP - Art. 20, Clause 8; Art. 39, Clause 2)

###### Fulfill the requirements specified in the plan in the course of carrying out chemical-related activities;

###### Retain the plan at the factory/store as the basis for supervising safety at the chemical factory/store, and present it to competent authorities if required;

###### Organize drills on the response to chemical emergencies developed in the plan in the presence of representatives of the central or local specialized authorities annually;

###### Submit a report on any change to the investment process and activities related to contents stated in the plan to the inspection authority (if any). Remaking of the plan, application and procedures of inspection and approval of the plan shall be carried out similarly to those in the first time.

*Entities required* *conducting CIPRP but have been put into operation before Decree 113/2017 / ND-CP came into effect (October 9, 2017) without any plans for prevention and response to chemical emergencies approved by a competent authority shall develop such plans to the competent authority for inspection and approval for two years from the effective date of this Decree.*

### Process of implementation of the CIPRP

Dec. 113/2017/NĐ-CP

Art. 20, Clause 5,6g

*Content*

**Form**

Circ.32/2017/TT-BCT

App. 6

*Entities*

Entities required conducting CIPRP

**CIPRP**

Dec. 113/2017 / ND-CP

  Appendix IV

*Dossier*

**Form**

Circ. 32/2017/TT-BCT

App. 3

A completed application form as Form 03a

CIPRP: nine (9) copies

Submission to the verifier by mail or directly or through the public service.

*Assessment*

To be done through the Council

*Approval*

The time for assessment and approval of the plan is 22 working days.

Approval decisions and plans are sent to organizations, individuals and regulatory agencies

*Implementation*

Complies with the requirements of the approved Plan.

Keeping and presenting Plan when required.

Annually, to organize the disaster response plan with the witness of the management agency

Dec. 113/2017/NĐ-CP

Art. 20, Clause 8

Resubmit a reassessment report when there is a change

Dec. 113/2017/NĐ-CP

Art. 20, Clause 6 c

Dec. 113/2017/NĐ-CP

Art. 20, Clause 4,5,6a

Introduce

C1. Information related to project activities, chemical facilities

C2. Predict the risk, situation of chemical incident

C3. Preventive measures

C4. Chemical incident response plan

C5. Capacity to respond to chemical incidents

C6. The plan to overcome the consequences of chemical incidents

C6. Recommendations and commitments

*Content*

*Dossier*

### Process of implementation of the CIPRP

Dec. 113/2017/NĐ-CP

Art. 20, Clause 5,6g

*Content*

**Form**

Circ.32/2017/TT-BCT

App. 6

*Entities*

Entities required conducting CIPRP

**CIPRP**

Dec. 113/2017 / ND-CP

  Appendix IV

*Dossier*

**Form**

Circ. 32/2017/TT-BCT

App. 3

A completed application form as Form 03a

CIPRP: nine (9) copies

Submission to the verifier by mail or directly or through the public service.

*Assessment*

To be done through the Council

*Approval*

The time for assessment and approval of the plan is 22 working days.

Approval decisions and plans are sent to organizations, individuals and regulatory agencies

*Implementation*

Complies with the requirements of the approved Plan.

Keeping and presenting Plan when required.

Annually, to organize the disaster response plan with the witness of the management agency

Dec. 113/2017/NĐ-CP

Art. 20, Clause 8

Resubmit a reassessment report when there is a change

Dec. 113/2017/NĐ-CP

Art. 20, Clause 6 c

Dec. 113/2017/NĐ-CP

Art. 20, Clause 4,5,6a

Introduce

C1. Information related to project activities, chemical facilities

C2. Predict the risk, situation of chemical incident

C3. Preventive measures

C4. Chemical incident response plan

C5. Capacity to respond to chemical incidents

C6. The plan to overcome the consequences of chemical incidents

C6. Recommendations and commitments

*Content*

## CHEMICAL INCIDENT PREVENTION AND RESPONSE MEASURES (CIPRM)

### Entities required to conduct CIPRM

#### (Dec 113/2017/NĐ-CP - Art. 21, Clause 1)

###### Investors of projects that involve in production, trade, storage or use of chemicals that do not have chemicals stored as in Appendix IV of Decree 113/2017/ND-CP shall propose measures before projects come into operation.

###### Investors shall make decisions on issuance of such measures and present to competent authorities if required.

### Contents of CIPRM

#### (Law on Chemicals - Art. 36; Dec 113/2017/NĐ-CP - Art. 21, Clause 2; Cir. 32/2017/TT-BCT- Art. 5, Clause 1 Annex 6)

Chemical incident prevention and response measures contain the following principal contents:

###### Determining, zoning off and elaborating plans on regular inspection of, spots highly prone to chemical incidents.

###### Measures, equipment, devices and forces for on-site response.

###### Plans on coordination with outside forces in responding to chemical incidents.

Layout and contents of CIPRM are provided in Appendix No. 6 of Circular No. 32/2017 / TT-BCT.

### Responsibilities of entities implementing CIPRM

#### (Dec 113/2017/NĐ-CP - Art. 21, Clause 3, Art. 39, Clause 3,Cir. 32/2017/TT-BCT - Art. 5, Clause 2)

###### In the course of production, trade, use or storage of chemicals, entities shall comply with contents stated in measures that have been proposed.

###### Measures shall be retained at factories/stores of entities and become the basis for them to carry out supervision of chemical safety.

###### Entities shall revise measures in case of any change to the investment process and activities related to the contents proposed in measures.

###### Within 10 (ten) working days from the day on which the decision on issuance of measures for prevention of and response to chemical emergencies is given, the investor shall send a copy of the decision and a book of measures to the Department of Industry and Trade of the province where the project is developed.

*For the entities required conducting CIPRM that has come into operation before the effective date (October 9, 2017)of Decree 113/2017 / ND-CP without any measures for prevention of and response to chemical emergencies, the producer or trader shall develop and make a decision on such measures for one year from the effective date of this Decree.*

### Process of implementation of CIPRM

#### (Dec 113/2017/NĐ-CP - Art. 21; Cir. 32/2017/TT-BCT - Annex 6)

*Content*

**Form**

Cir. 32/2017/TT-BCT

App. 6

*Entities*

Entities required conducting CIPRM

Dec. 113/2017/NĐ-CP

Art. 21, clause 1a

**CIPRM**

Measures shall be kept at the chemical facility and be the basis for implementation

When there is a change, the facility shall supplement and adjust amend for CIPRM

The investor issues a decision on the issuance of the measure

During the period of 10 decisions on the issuance of measures, the investor shall send one copy of the decision and one copy of the measure to the provincial Department of Industry and Trade for supervision and management.

Dec. 113/2017/NĐ-CP

Art. 21, clause 1b

Complies with the requirements of CIPRM

Dec. 113/2017/NĐ-CP

Art. 21, clause 3

 Introduction

C1. Information related to project activities, chemical facilities

C2. Predict risk, incident situations and measures to prevent chemical incidents

C3. Chemical incident response measure

Conclude

*Approval*

*Implementation*

## SAFETY DISTANCES

### Develop and issue technical regulations on safety distance

#### **(**Dec 113/2017/NĐ-CP - Art. 22, Clause 1)

The Ministry of Industry and Trade shall take charge and cooperate with relevant ministries and authorities in development, and issue technical regulations on specific safety distance for production, trade, storage or use of hazardous chemicals mentioned in Appendix IV of Decree 113/2017/ND-CP.

*As of May 2018, technical regulations for safe distance have not been issued.*

### Responsibilities of establishment of the safety distance

#### (Dec 113/2017/NĐ-CP - Art. 22, Clause 2)

###### Projects involving in production, trade, storage or use of hazardous chemicals specified in Appendix IV of Decree 113/2017/ND-CP. and having the design of factories/stores inspected by inspecting authorities after the effective date of the technical regulations on safety distance shall establish the safety distance for residential areas, public works, historical and cultural sites, places of scenic beauty, natural reserves, national parks, biosphere reserves, habitat conservation zones, marine conservation zones and domestic water sources in the feasibility study reports;

###### Entities shall not construct housing or other works within safety distance, apart from specialized works permitted by a competent state authority;

## HAZARDOUS CHEMICAL, BANNED CHEMICAL, TOXIC CHEMICAL

### Hazardous chemical

#### (Law on chemical - Art.4, Clause 4)

Hazardous chemical means a chemical having one or several of the following hazardous properties according to classification principles of the Globally Harmonized System of Classification and Labeling of Chemicals:

###### Explosive

###### Strongly oxidative

###### Strongly corrosive

###### Flammable

###### Acutely toxic

###### Chronically toxic

###### Causing irritation to humans

###### Causing cancer or posing threats of causing cancer

###### Causing genetic mutation

###### Reproductively toxic

###### Bio-accumulative

###### Organically polluting and hard to decay

###### Environmentally toxic.

### Preservation of information on hazardous chemicals

#### (Law on Chemicals - Art. 53)

###### Project owner engaged in chemical-related activities shall formulate, regularly update and preserve information on hazardous chemicals in their chemical-related activities for at least three (3) years from the date of ending activities involving these chemicals.

###### Information to be preserved covers scientific names and trade names of chemicals; quantities of chemicals produced, imported, used or discarded; use purposes and classification of hazard categories according to the GHS; and information relating to chemical incidents and chemical safety in the facilities.

###### If a chemical facility has several branches, hazardous chemical data must cover all information relating to the facility and its branches.

### Transportation of hazardous chemicals

#### (Law on Chemicals - Art. 20)

###### Organizations that transport hazardous chemicals shall abide by the provisions on the transportation of dangerous cargoes in the laws on road, inland waterway, railway, air and sea transport and other relevant laws.

###### If an incident occurs en-route, vehicle operators, goods owners and vehicle owners shall take necessary measures to minimize and remedy consequences; and at the same time, notify the incident to the nearest Peoples Committee and concerned agencies.

### Banned chemical

#### (Law on Chemicals - Art. 19; Dec 113/2017/NĐ-CP - Art.18, Clause 1 Annex III)

###### Banned chemicals are extremely hazardous chemicals on the list of banned chemicals promulgated by the Government.

###### Organizations and individuals may not produce, trade in, transport, store and use chemicals on the list of banned chemicals, except for cases prescribed in Clause 3 below.

###### In special cases for the purposes of scientific research, defense and security assurance or epidemic prevention and control, the production, import and use of chemicals on the list of banned chemicals must be permitted by the Prime Minister.

###### Organizations and individuals, permitted to produce, import or use chemicals on the list of banned chemicals, shall strictly manage these chemicals in terms of quantity, not let any loss or incident occur and make periodical reports.

###### The list of banned chemicals is provided in Appendix III of Decree 113/2017/ND-CP

### Toxic chemical

#### (Law on Chemicals - Art. 4, Clause 5)

Toxic chemical means a hazardous chemical having at least one of the following hazardous properties:

###### Acutely toxic

###### Chronically toxic

###### Causing irritation to humans

###### Causing cancer or posing threats of causing cancer

###### Causing genetic mutation

###### Reproductively toxic

###### Bio-accumulative

###### Organically polluting and hard to decay

###### Environmentally toxic.

### Control of the sale and purchase of toxic chemicals

#### (Law on Chemicals - Art. 23, Clause 1,2,3; Cir. 32/2017/TT-BCT - Art. 4, Annex 4)

###### The sale and purchase of toxic chemicals require control cards certified by the seller and the purchaser as a basis for the control of toxic chemicals circulated in the market.

###### A toxic chemical sale and purchase control card contains information on the name, quantity and use purpose of the chemical; names and signatures of the seller and the purchaser; addresses and identity card serial numbers of representatives of the seller and the purchaser; and the date of delivery. A toxic chemical sale and purchase control card is issued in Appendix 4 of Circular No. 32/2017 / TT-BCT.

###### Toxic chemical sale and purchase control cards must be preserved by the seller and the purchaser for at least five years and produced at the request of competent state agencies.

## DECLARATION OF CHEMICALS

### List of declaration of chemicals

#### (Law on Chemicals - Art. 43, Clause 1, 2; Dec 113/2017/NĐ-CP - Art. 25, Clause 1 - Annex V)

###### Chemical-importing organizations shall declare chemicals to the Ministry of Industry and Trade.

###### A chemical declaration contains:

1. Name and address of the chemical importer
2. Name, quantity, and origin of the chemical

###### The list of declared chemicals is provided in Appendix V of Decree No. 113/2017/ND-CP.

###### Declared chemicals include substances on the list of those to be declared and mixtures containing substances on the list of declared chemicals.

### Declaration of imported chemicals

#### (Dec 113/2017/NĐ-CP - Art. 27, Annex VI)

###### Chemical importers (declarants) shall declare imported chemicals before customs clearance through the national single-window website.

###### Creating of accounts to get access to the national single-window website:

1. The declarant shall create a log-in account according to the specimen provided on the national single-window website, including information and attached files.
2. A declaration-receiving authority may request the declarant to submit the documents and documentation specified in point a of this clause in hard copy to clarify or confirm information of the declarant if necessary.

###### Information about the declaration of imported chemicals:

1. Information declared according to the specimen provided in Form No. 05 - Appendix VI of Decree No. 113/2017 / ND-CP on the national single-window website including information about the declarant and imported chemicals.
2. Sale and purchase invoices of chemicals.
3. Safety data sheets in Vietnamese.

###### Validity of electronic documentation

1. The declarant shall declare information through the national single-window website. Information will be automatically transferred to the system of the Ministry of Industry and Trade and then will automatically respond feedback through the national single-window website to the declarant and the customs. The feedback will become the proof of completion of chemical declaration, as a basis for relevant entities carrying out customs clearance procedures.
2. The information on declaration feedback of imported chemicals through the national single-window website shall be made according to the specimen provided in Form No. 06 - Appendix VI of Decree No. 113/2017 / ND-CP with legal validity for carrying out customs clearance procedures.

###### Arising system errors: If system errors arise and the declarant fails to make declaration through the national single-window website, while pending the settlement of errors, the declarant may declare imported chemicals through the standby system regulated by the declaration-receiving authority.

###### Responsibilities of declarants: The declarant shall take responsibility for accuracy of declared information according to the specimen available on the national single-window website and documents, documentation and electronic data in the set of document on declaration of chemicals through the national single-window website. If the declared information is incorrect, the declarant shall be sanctioned according to applicable regulations. The declarant shall retain the set of documents on declaration of chemicals to present it to competent authorities if required and the duration of retention shall be at least 5 years.

### Cases where declaration of chemicals is exempted

#### (Dec 113/2017/NĐ-CP - Art. 28, Clause 3)

The amount of chemicals is under 10 kg/shipment. Exemption mentioned in this point shall not apply to restricted industrial chemicals.

## SUPPLY OF INFORMATION ON CHEMICALS

### Information on new hazardous properties of chemicals

#### (Law on Chemicals - Art. 48, Clauses: 1, 2, 5)

###### Upon detection of signs of new hazardous properties of chemicals, organizations engaged in chemical-related activities shall promptly report these properties to the Ministry of Industry and Trade and notify these properties to organizations or individuals that have produced or imported these chemicals.

###### Organizations producing or importing chemicals, which show signs of new hazardous properties, shall report to the Ministry of Industry and Trade for consideration and collection of additional scientific grounds on these new hazardous properties.

###### After obtaining official conclusions of competent state agencies on new hazardous properties of chemicals, organizations that have produced or imported these chemicals shall modify and supplement chemical labels and chemical safety data sheets to reflect the new hazardous properties.

### Obligations to supply information

#### (Law on Chemicals - Art. 49)

###### Upon occurrence of chemical incidents in chemical facilities;

###### For the prevention of natural disasters which may cause chemical incidents in chemical facilities;

###### For the investigation and survey in service of the elaboration of strategies, planning and plans on regional or chemical industry development;

###### For the examination and inspection of chemical-related activities.

## REGISTRATION OF NEW CHEMICALS

#### (Law on Chemicals - Art. 44, Clauses 1, 2)

###### New chemicals may be used only after they are registered with competent state agencies.

###### A dossier of registration comprises of:

1. An application for registration of a new chemical;
2. The name of the new chemical under the guidance of the International Union of Pure and Applied Chemistry (IUPAC) and the chemical formula of the chemical;
3. Information on physical and chemical properties and hazardous properties of the chemical, certified by a new chemical-assessing organization.

## TRAINING COURSES IN CHEMICAL SAFETY

### Provision of training courses in chemical safety

#### (Dec 113/2017/NĐ-CP - Art. 31, Clause 1,2,3)

1. Entities having chemical-related activities shall provide training courses in chemical safety or appoint the individuals specified (see 12.16.2) to participate in training courses organized by chemical safety training centers every two years.
2. Chemical safety training activities may be organized separately or in combination with other safety training activities regulated by law.
3. Trained persons must be retrained in if there is a change in the categories of chemicals, technologies, facilities and production plans related to their working positions; if they change their working positions; they fail to meet the training requirements after taking the second examination two years after the previous training course.

### Individuals provided with training courses in chemical safety

#### (Dec 113/2017/NĐ-CP - Art. 32)

###### Group 1:

1. Heads of factories/stores, divisions and branches, heads of production/trade/technical departments, managers of factories or equivalents;
2. Vice heads of factories/stores mentioned in Point a above responsible for chemical safety.

###### Group 2:

1. Full-time or part-time officials responsible for chemical safety of factories/stores;
2. Supervisors directly overseeing chemical safety.

###### Group 3: Employees directly involving in chemicals.

### Programs, trainers and period of training courses in chemical safety

#### (Dec 113/2017/NĐ-CP - Art. 33)

###### Programs of training courses in chemical safety shall be in line with positions of trainees; nature, types and hazards of chemicals in factories.

###### Group 1 training programs:

1. Regulations of law on chemical-related activities.
2. Hazardous elements in storage and use of chemicals in factories.
3. Plans for cooperation with competent authorities in mobilizing internal and external resources of chemical factories to take preventive and remedial measures for chemical emergencies.

###### Group 2 training programs:

1. Regulations of law on chemical-related activities.
2. Hazards of chemicals, safety data sheets of every hazardous chemical in storage and use of chemicals of factories, classification and labeling of chemicals
3. Process of chemical safety management, safety techniques when working and contacting with hazardous chemicals.
4. Hazardous elements in storage and use of chemicals in factories.
5. Preventive measures and response to chemical emergencies; plans for cooperation with competent authorities in mobilizing internal and external resources of factories to take preventive and remedial measures for such emergencies; preventive measures for limiting pollution causes spreading to the environment; remedial measures for the environment after chemical emergencies.

###### Group 3 training programs:

1. Chemicals used for storage and use of chemicals in factories including names and hazards of chemicals, classification and labelling of chemicals and safety data sheets.
2. Risks of chemical unsafety in storage and use of chemicals.
3. Processes of storage and use of chemicals suitable for working positions; regulations on chemical safety.
4. Procedures for responding to chemical emergencies: Use of rescue means to handle emergencies related to fire or spread of chemicals; first aid for victims in chemical emergencies; use, preservation and inspection of safety equipment, means and equipment for personal protection in order to cope with chemical emergencies; process and communication diagram of emergency notification; preventing and limiting sources of pollution spreading to the environment; collecting chemical spills and taking remedial measures for the environment after chemical emergencies.

###### Trainers of chemical safety: Trainers of chemical safety shall obtain a bachelor’s degree or higher degree in chemicals and have at least five years of working in the field of chemical safety.

###### Period of training in chemical safety:

1. Group 1: At least eight hours including time for examinations.
2. Group 2: At least 12 hours including time for examinations.
3. Group 3: At least 16 hours including time for examinations.

### Assessment of results and retention of documents on training in chemical safety

#### (Dec 113/2017/NĐ-CP - Art. 34)

###### Entities having chemical-related activities or chemical safety training centers shall set examinations on to assess results of training in chemical safety.

###### Regulations on examinations

1. Examination contents shall be suitable for training programs;
2. The maximum time for an examination is twohours.
3. Pass examination shall reach at least average scores.

###### Within 15 working days from the day on which the training courses and examinations on chemical safety complete, entities providing training courses and setting examinations shall issue decisions on accreditation of chemical safety examination results.

###### Documents on training in chemical safety include:

1. Training programs;
2. The list of trainees including full name, date of birth, title, position and signature of each trainee.
3. Information about trainers including full name, date of birth, educational level, major, working experience and proving documents of each trainer;
4. Contents and results of examinations on chemical safety;
5. Decisions on accreditation of chemical safety examination results.

###### Organizations and individuals shall retain all the documents stated in Clause 4 above for 3 years and present them to state authorities if required.

## REPORTING

#### (Cir. 32/2017/TT-BCT - Art. 9, Clause 1, Annex 5)

###### Before January 15 every year, entities having industrial chemical-related activities shall make reports on their chemical-related activities in the previous year according to the specimen No. 5a provided in Appendix No. 5 of Circular No. 32/2017/TT-BCT, and send them to the Department of Industry and Trade of the province where such activities are carried out and to the Vietnam Chemicals Agency.

###### The periodic reporting mentioned in Point 1 above shall be made through the national database on chemicals after it is complete.

###### Entities having industrial chemical-related activities shall make reports on their chemical-related activities, and send them to the Department of Industry and Trade of the province where they are carrying out such activities when there is any chemical emergency arising or such activities are ceased or at the request of a competent authority.

## PROHIBITED ACTS IN CHEMICAL-RELATED ACTIVITIES

#### (Law on Chemicals - Art. 7)

###### Producing, trading in, transporting, storing, using, sending or donating hazardous chemicals in contravention of Law on Chemicals and other relevant legal provisions.

###### Failing to disclose necessary information, supplying inadequate or false information or concealing information on hazardous properties of chemicals or hazardous chemical-containing products

###### Using chemicals outside the list of those permitted for use and chemicals not up to standards, quality, of excess of permitted content in food production, preservation, medicines, food for cattle, veterinary medicines, plant protection products, fertilizers, consuming chemical products

###### Using toxic chemicals in committing acts of infringing upon human health, properties or the environment.

## HANDLING OF VIOLATIONS

### Handling of violations

#### (Law on Chemicals - Art. 67, Clause 1)

Agencies and organizations that violate the provisions of the law and other legal provisions on chemical-related activities, depending on subject, nature and severity of their violations, shall be administratively sanctioned or examined for penal liability; if causing damage, they shall pay compensations in accordance with law.

### Remedial measures

#### (Dec. 71/2019/NĐ-CP - Art. 3)

Apart from the primary penalties and additional penalties, the organizations that commit administrative violations (hereinafter referred to as violators) must take the following remedial measure: removing from Vietnam or destroying the hazardous chemicals, destroying the textile and garment products that exceeds the permissible limits on harmful chemicals.

### Violations against regulations

#### (Dec. 71/2019/NĐ-CP - Art. 5, Art. 14, Art.15, Art, 22 Art. 23)

###### Violations against regulations on safety during the storage of hazardous chemicals.

###### Violations against regulations on registration and use of hazardous chemicals.

###### Violations against regulations on reporting manufactured and imported chemicals.

###### Violations against regulations on retention of information about hazardous chemicals.

###### Violation against on MSD.

# GOVERNMENT INCENTIVES AND ASSISTANCE

## LIST OF ENVIRONMENTAL PROTECTION ACTIVIES RECEIVING INCENTIVES AND ASSISTANCE

(Dec. 40/2019/NĐ-CP, item 2 Section II Appendix )

###### Production of environmentally friendly products which are certified to Vietnam green label; products from the recycling and treatment of waste which the competent state authorities have certified.

###### Manufacturing and importing of machinery, equipment and special-use means for direct use in collection, transport, treatment of waste; environmental monitoring and analysis, production of renewable energy, treatment of environmental pollution, response and handling of environmental incidents.

###### Activities of services, business and production of the environmentally friendly facilities that have been certified with eco-label by the Ministry of Natural Resources and Environment

## GOVERNMENT INCENTIVES AND ASSISTANCES FOR ENVIRONMENTAL PROTECTION

### Incentives for land rent and assistance on site clearance and compensation

#### (Dec. 40/2019/NĐ-CP, item 2 Section II)

The project owners of #1 and #2 listed above under section 13.1 are entitled to the incentives for land rent as stipulated by the regulations of law on land like the subjects in the fields of special investment incentives.

### Incentives for investment capital

#### (Dec. 19/2015/NĐ-CP, - Art. 42, Clause 1, 2, 4)

The project owners carrying out project activities mentioned above under section 13.1 are entitled to preferential investment credit from Vietnam Development Bank as for projects defined in list of investment credit loans according to the current provisions of the law.

### Preferential interest and tax rates

#### (Dec. 40/2019/NĐ-CP, Art. 4 Clause 22 )

###### Incentives from the Vietnam Environmental Protection Fund, local environmental protection fund and other credit institutions: Project investors carrying out activities specified on list 13.1 shall be entitled to borrow capital at the highest preferential interest rates of 50% of the State's investment credit interest rate announced by the competent body at the time of lending, the total loan amount shall not exceed 70% of the total investment in the construction of works; prioritized post-investment support or loan guarantee.

###### The enterprise income from the implementation of new investment for project activities mentioned above under section 1.13 shall be entitled to the preferential enterprise income tax.

###### The project investor shall carry out the activities on list 13.1, if it is a project defined in the plans and strategies promulgated by the Prime Minister, the Government and the National Assembly and of the prescribed domains in the Law on Public Debt Management and guiding documents, shall be given priority to the consideration and use of official development assistance (ODA).

### Preferential import and export tax

#### (Dec. 19/2015/NĐ-CP, Art. 44, Clause 1)

Manufacturing and importing of machinery, equipment and special-use means for direct use in collection, transport, treatment of waste; environmental monitoring and analysis, production of renewable energy, treatment of environmental pollution, response and handling of environmental incidents shall be entitled to preferential import and export tax.

### Support product promotion, classification of waste at source

#### (Dec. 19/2015/NĐ-CP - Art. 48, Clause 1, 2)

###### The State:

1. Promotes products from environmental protection activities, recovery, processing discarded products,
2. Encourages production and dissemination of films and television programs on environmental protection in order to raise people's awareness of environmental protection and the use of eco-friendly products;

###### Expenses for implementation of such activities specified in number 1 above are accounted into the production costs of organizations, individuals, enterprises or cooperatives.

### Environmental protection in progress of international economic integrati

#### (2015 Law on Environmental protection, Art. 1570

1. The State encourages agencies, organizations and individuals to take initiative in meeting environmental requirements in order to raise the competitiveness of commodities and services on regional and international markets.
2. Agencies, organizations and individuals participating in international economic integration shall have the responsibility to prevent and limit adverse impacts on domestic environment.

## POLICY INCENTIVES FOR ENERGY

### Incentives for economical and efficient use of energy

#### (Law on Economical and Efficient Use of Energy, Art. 41)

###### Projects promoting economical and efficient use of energy shall be considered for financial support from the national program on economical and efficient use of energy.

###### Organizations and individuals that manufacture energy-saving products and invest in production lines or expand production with energy-saving technologies are entitled to the following incentives and supports:

1. Incentives on import and export duties and enterprise income tax under the tax law;
2. Incentives under the land law;
3. Concessional loans from the development bank, the fund for science and technology development support, the national fund for technological renovation and the environment facility and supports from the national programs on hi-tech development and economical and efficient use of energy;
4. Other incentives under this Law and relevant laws.

###### Devices, equipment, components and supplies for research to develop energy-saving technologies and products, fuel-saving vehicles and those using liquefied gas, natural gas, electricity and mixed fuels and biofuels which are domestically unavailable and on the list provided by the Government are entitled to import duty exemption or reduction under the tax law.

### Support for the manufacture and import of energy-efficient devices and equipment; renewable energy-consuming devices and equipment, and energy audit

#### (Dec. 21/2012/TT-BCT - Art. 28, Clause 1, 2, 3)

###### The State provides tax incentives and supports in capital and land for manufacturers of domestic energy-efficient products and renewable energy-consuming products to build manufacture facilities.

###### Energy-efficient and renewable energy-consuming devices and equipment, parts and components which are domestically unavailable are entitled to import duty exemption and reduction under the tax law, including:

1. Devices, equipment, parts and supplies for research into development and renovation of energy-efficient technologies, programs on survey, research, trial manufacture and formulation of typical projects to use renewable energy.
2. Parts and components for the manufacture of energy-efficient lighting devices and equipment, devices and equipment using solar and wind power.
3. Energy-efficient products, fuel-efficient vehicles and vehicles running on liquefied gas, natural gas, electricity, mixed fuel or bio-fuel which are domestically unavailable.

###### The national target program on economical and efficient use of energy shall partly fund energy users for conducting energy audits for the first time.

# ANNEX – About this edition of the guide

This edition of the “Guide to Vietnamese Environmental Law for the Garment Industry” is an updated version of the first edition from January 2019. It includes new and revised environmental legislation that took place during the period January 2019 – January 2021. A total of 40 items within ten sections of the previous guide have been updated to reflect these changes, including decrees and circulars, and two technical standards. The main changes relate to the update of “Decree 40/2019/ND-CPO – Amendments to decrees on guidelines for the law on environment protection”, mainly related to environmental permitting requirements (EIA and Environmental Protection Plans), monitoring of wastewater and air emissions, enhanced requirements for solid domestic, and industrial waste management.

The table below is a summary of the topics which have been updated in the 2021 version of the guide.

|  |  |
| --- | --- |
| **Section in the guide** | **Updated contents** |
| Section 1: General Environmental Regulations | 1.4.2 Responsibility for environmental damage .  Updates to principles for determining facilities causing environmental pollution. |
| Section 2: Pre-Operation Permits and Assessments | 2.1.2 Entities required to conduct an EIA.  Changes to the capacity of projects requiring an EIA. |
| 2.1.4 Consultation requirements in the EIA process.  Change to the code of the new decree, no change to content. |
| 2.1.5 Remarking the EIA report.  Changes to circumstances where there is a need to remaking and updating the EIA. |
| 2.1.6 Project owner’s responsibilities after approval of EIA.  Changes on all contents – especially to the responsibilities of project owner. |
| 2.1.7 EIA process flowchart. Updates to the contents of the EIA report.  Change to the code of the new decree. |
| 2.2.1 Entities required to register an Environmental Protection (EP) Plan.  Changes on the capacity of projects requiring an EP Plan. |
| 2.2.3 Remaking and re-registration of EP Plan.  Changes to the cases when remaking and updating the EP Plan is required. |
| 2.2.4 Project owner’s responsibilities after approval of the the EP plan.  Change to the code of the new decree, no change to content. |
| 2.2.5 Process of implementation of the EP Plan. Updates to the contents of the EP report. Change to the code of the new decree. |
| 2.3.1 Environmental Protection (EP) Schemes. Updates related to the new EP scheme requirements and validity of the requirements under the previous scheme to comply with Article 2, Clause 13 of Decree 40/2019 / ND-CP amending and supplementing Article 22 ND / 2015 / ND-CP. |
| 2.3.2 Transitional provision.  Change to the title and related to cases where transitional requirements are necessary. |
| Section 3: Environmental Dossier and Permits | 3.3. Environmental Regulatory Dossier.  Change to the code of the new decree, no change to content. |
| 3.4.1 Entities requiring, and time of, preparation of Environmental Protection (EP) Plan Update on entities requiring preparation of an EP Plan. |
| Section 4: Water Extraction and consumption | 4.10 Handling administrative violations against water resources. Updates on additional penalties. |
| Section 5: Wastewater Management | 5.8 Wastewater management  Update on establishments required to perform automatic and continuous wastewater monitoring. |
| 5.12 Monitoring of Wastewater discharge  Update on timescales to perform regular wastewater monitoring. |
| 5.13 Automatic monitoring of wastewater  Update on cooling water parameter |
| 5.15 National Technical Regulation on domestic wastewater  Update to new code of National Technical Regulation on domestic wastewater. |
| 5.17.3 Fee exemption  Update on establishments who receive fee exemption |
| 5.17.4 Fee Rate  Update to new fixed fee rate. |
| 5.17.5 Determination of the fee amount payable  Update on new method to calculate fee. |
| 5.17.6 Declaration, assessment of declarations and payment fee  Update to timescale for declaration. |
| Section 6: Solid Waste | 6.1 Interpretation for Industrial Solid Waste  Change to definition of Industrial Solid Waste. |
| 6.2 Household Solid Waste  Updates on requirements for authorised collectors and carriers of Domestic Solid Waste. Updates on requirements for generators of Domestic Solid Waste for reuse, pre-processing, recycling, treatment, co-treatment of waste, and recovery of energy from waste. Updates to requirements on transfer notes and annual reports. |
| 6.3 Ordinary Industrial Solid Waste  Updates to Ordinary Industrial Solid Waste classification. Updates to requirements for collectors and carriers of Ordinary Industrial Solid Waste. Updates on requirements for generators of Industrial Solid Waste for reuse, pre-processing, recycling, treatment, co-treatment of waste, and recovery of energy from waste. Updates to requirements on transfer notes and annual reports. |
| Section 7: Hazardous Waste | No updates. |
| Section 8: Air Emissions | 8.1 Interpretation Of Terms  Updates to the definition of dust. |
| Point sources of air emissions  Updates to timescales for undertaking periodical monitoring of exhaust gases. Updates to requirements for undertaking automatic and continuous emissions monitoring. |
| 8.4 Registration and licensing of industrial exhaust gases generators  Updates on the issuing of industrial emission licences. |
| 8.5 Automatic and continuous monitoring of industrial air emission  Updates to automatic and continuous emission monitoring parameters and technical requirements. |
| 8.6 National Technical Regulations On Dust And Industrial Air Emission  Updates related to National Technical Regulation on Dust. |
| Section 9: Noise and Vibration | No updates. |
| Section 10: Energy Management | 10.3.3 Specific energy consumption and improvements in energy efficiency  Removal of item no.5 on Industrial producer’s energy reporting. |
| 10.7 Planning on economical and efficient use of energy  Update to the content of Annual and Five-year Plans. |
| 10.9.2 Energy Audit  Change to the code of the new circular. No change in content. |
| 10.9.4. Energy audit and reporting on energy use at establishments outside the list of major energy users  Change to the code of the new circular. No change in content. |
| Section 11: Response to Climate change | Do not have any update |
| Section 12: Chemical Handling and Management | 12.19.2 Remedial measures  Change to the code of the new decree. No change in content |
| 12.19.3. Violations against regulations  Updates on violation against MSDS requirements. |
| Section 13: Government Incentives and Assistances | 13.1. List of environmental protection activities receiving incentives and assistance  Change to the code of the new decree, no change to content. |
| 13.2.1. Incentives for land rent and assistance on site clearance and compensation  Change to the code of the new decree, no change to content. |
| 13.2.3. Preferential interest and tax rates  Change to the code of the new decree, no change to content. |