

Notification of the Ministry of Natural Resources and Environment
on Projects, Undertakings, or Operations Required to Provide an Environmental Impact
Assessment Report and Rules, Procedure, and Conditions in Providing
an Environmental Impact Assessment Report

As it is appropriate to improve how to stipulate projects, undertakings, or operations that are required to provide an environmental impact assessment report and rules, procedure, and conditions in providing an environmental impact assessment report and in order to be consistent with an amendment to the Enhancement and Conservation of National Environmental Quality Act B.E. 2535,

Under the power of Sections 48 and 51/4 of the Enhancement and Conservation of National Environmental Quality Act B.E. 2535 as amended by the Enhancement and Conservation of National Environmental Quality Act (No. 2) B.E. 2561, the Minister of Natural Resources and Environment, with the National Environmental Board's approval, notifies the followings herewith:

No. 1: The followings shall be repealed:

(1) Notification of the Ministry of Natural Resources and Environment Re: Types and Sizes of Projects or Activities Requiring Environmental Impact Assessment Report and Rules, Procedures, Practices and Guidelines for Providing Environmental Impact Assessment Report, dated 24 April B.E. 2555;

(2) Notification of the Ministry of Natural Resources and Environment Re: Types and Sizes of Projects or Activities Requiring Environmental Impact Assessment Report;and Rules, Procedures, Practices and Guidelines for Providing Environmental Impact Assessment Report No. 2 (B.E. 2556 (2013)), dated 6 February B.E. 2556;

(3) Notification of the Ministry of Natural Resources and Environment Re: Types and Sizes of Projects or Activities Requiring Environmental Impact Assessment Report;and Rules, Procedures, Practices and Guidelines for Providing Environmental Impact Assessment Report No. 3 (B.E. 2556 (2013)), dated 11 November B.E. 2556;

(4) Notification of the Ministry of Natural Resources and Environment Re: Types and Sizes of Projects or Activities Requiring Environmental Impact Assessment Report;and Rules, Procedures, Practices and Guidelines for Providing Environmental Impact Assessment Report No. 4 (B.E. 2557 (2014)), dated 27 October B.E. 2557;

(5) Notification of the Ministry of Natural Resources and Environment Re: Types and Sizes of Projects or Activities Requiring Environmental Impact Assessment Report;and Rules, Procedures, Practices and Guidelines for Providing Environmental Impact Assessment Report No. 5 (B.E. 2557 (2014)), dated 25 December B.E. 2557;

(6) Notification of the Ministry of Natural Resources and Environment Re: Types and Sizes of Projects or Activities Requiring Environmental Impact Assessment Report;and Rules, Procedures, Practices and Guidelines for Providing Environmental Impact Assessment Report (No. 7) B.E. 2558 (2015), dated 19 August B.E. 2558;

(7) Notification of the Ministry of Natural Resources and Environment Re: Types and Sizes of Projects or Activities Requiring Environmental Impact Assessment Report;and Rules,

Procedures, Practices and Guidelines for Preparing Environmental Impact Assessment Report (No. 8), B.E. 2558 (2015), dated 5 November B.E. 2558

(8) Notification of the Ministry of Natural Resources and Environment Re: Types and Sizes of Projects or Activities Requiring Environmental Impact Assessment Report; and Rules, Procedures, Practices and Guidelines for Providing Environmental Impact Assessment Report No. 9 (B.E. 2559 (2016)), dated 22 November B.E. 2559;

(9) Notification of the Ministry of Natural Resources and Environment Re: Types and Sizes of Projects or Activities Requiring Environmental Impact Assessment Report; and Rules, Procedures, Practices and Guidelines for Providing Environmental Impact Assessment Report No. 10 (B.E. 2560 (2017)), dated 21 April B.E. 2560;

(10) Notification of the Ministry of Natural Resources and Environment Re: Types and Sizes of Projects or Activities Requiring Environmental Impact Assessment Report; and Rules, Procedures, Practices and Guidelines for Providing Environmental Impact Assessment Report No. 11 (B.E. 2560 (2017)), dated 12 October B.E. 2560.

No. 2: In this Notification:

“size” shall include number, production capacity, hold of weight, as the case may be;

“expert committee” means those persons appointed or approved by the National Environmental Board to perform duties in considering environmental impact assessment reports, both in general and in specific areas such as the Bangkok area, other provinces, or the areas required to apply environmental protection measures;

“permit/permission” means an act that a government official consents to a person’s action which the law requires a consent, and shall include issuing a license/permit, authorization, registration, enrollment, notification receipt, and granting concession and license;

“waste” means paper waste, cloth waste, food waste, goods waste, materials waste, plastic bags, food containers, ashes, animal dung or carcasses or any other items swept and retrieved from roads, marketplaces, animal farms, or other places;

“area where air pollution pollutant exceeds 80 percent” means an area where the measurements of total suspended particulate or particulate matter no larger than 100 microns, particulate matter no larger than 10 microns, sulfur dioxide and nitrogen dioxide before operation of a thermal power plant using waste as fuel, are more than 80 percent of the parameters specified in the National Environment Board’s notification issued under Section 32 of the Enhancement and Conservation of National Environmental Quality Act B.E. 2535 in at least 4 locations, provided that such measurements are conducted for at least 7 consecutive days during the period of March-September and October-February. Each measurement shall be conducted 5-7 months apart from each other, and all activities during the measurements and a layout plan indicating measurement locations shall be recorded.

“main river basin” means the 25 main river basins indicated in Annex 1 of this Notification;

“sluice gate in principal rivers” means a structure built in waterway with a sliding gate for water blockage or drainage in those principal rivers indicated in Annex 2 of this Notification;

“iron or steel industry” means:

Group 1: upstream or intermediate iron and steel products of which a project, undertaking, or operation involves smelting, melting or casting;

Group 2: downstream steel products of which a project undertaking, or operation involves:

(1) rolling, either hot or cold rolling, except cold roll forming and skin-pass or temper rolling;

(2) hot forging;

(3) iron or steel coating (including hot dipping, electroplating, chemical conversion or electrochemical conversion);

(4) ferrous metal foundries;

“building for retail or wholesale business” means a building under the law on building control which is used for an operation of retail or wholesale business of consumer goods mainly for personal, household, or daily use;

“retail or wholesale business” means operation of retail or wholesale business of consumer goods mainly for personal, household, or daily use;

“retail” means a business operation of selling goods in small quantities to a consumer;

“wholesale” means a business operation of selling goods in large quantities to a buyer who will subsequently resell them to a consumer or provide further services;

“onshore natural gas pipeline transportation system” means a natural gas pipeline transportation system under the law on natural gas pipeline transportation systems, whether installed on or under ground or in water or on any structure, but shall not include any natural gas pipeline transportation system located in an offshore area to the first onshore station.

Chapter 1

Projects, Undertakings, or Operations Required to Provide an Environmental Impact Assessment Report

No. 3: Those projects, undertakings, or operations of the State or which the State will grant permission to operate, with sizes specified in Annexes 3 and 4 of this Notification, shall be the projects, undertakings, or operations of which their operators or persons asking for permission shall provide an environmental impact assessment report.

No. 4: For the projects, undertakings, or operations of the State or which the State will grant permission to operate but their size not reaching the specifications in No. 3, if those projects, undertakings, or operations afterwards are expanded and their size reaches the criteria specified, the operators or persons asking for permission shall provide a report pursuant to this Notification.

In case where any project, undertaking, or operation is provided an environmental impact assessment report pursuant to this Notification and a government official with the legal power to grant permission indicates environmental impact prevention and correction measures, environmental impact monitoring measures, and submission of an implementation report of those measures, as conditions for granting permission or renewing a license under relevant laws, the

operator or person asking for permission, in adjusting any details, expansion of the project, undertaking, or operation, causing the operation to differ from that indicated in the report, shall provide information, report the detail adjustment, or provide a new environmental impact assessment report. All of these shall be consistent and pursuant to adjustment conditions prescribed in the environmental measures of that particular project, undertaking, or operation.

Consideration of an environmental impact assessment report under this Notification, where it requires an amendment, provision of new statistics, information, or academic rationales in any matter, shall fall under an expert committee's discretion. However, the expert committee shall express the properness, commensuration, and necessity in exercising a discretion in that matter. The expert committee's opinions in such matter shall be final.

No. 5: In case where any project, undertaking, or operation of the State or which the State will grant permission to operate, is a project, undertaking, or operation required to provide an environmental impact assessment report pursuant to a notification of the Ministry of Natural Resources and Environment on projects, undertakings, or operations which may seriously impact natural resources, environmental quality, health, sanitation, life quality of people in a community and are required to provide an environmental impact assessment report and rules, procedure, and conditions in providing an environmental impact assessment report, the operator or person asking for permission shall provide only an environmental impact assessment report in accordance with that notification.

Chapter 2

Rules, Procedure, and Conditions in Providing an Environmental Impact Assessment Report

No. 6: An environmental impact assessment report of a project, undertaking, or operation for which the operator or person asking for permission shall provide a report pursuant to No. 3, shall consist of the followings:

- (1) an initial environmental impact report, and
- (2) an environmental impact assessment report.

No. 7: An initial environmental impact report under No. 6 (1) shall at least consist of the following key substances:

(1) Introduction: shall demonstrate background, objectives, rationales and necessities, scope of the study, methodology, as well as location alternatives and/or methodology alternatives, which shall be consistent with objectives of and how to implement the project, undertaking, or operation. Reasons and decisions made in choosing those proposed alternatives shall also be specified.

(2) Project Details: shall contain the details that can clearly demonstrate an overall picture of the project, undertaking, or operation, namely, types, sizes, implementation methods, component activities, and location of the project, undertaking, or operation, with photographs and maps showing the location as well as photographs and maps showing environmental components in the areas that may be impacted by the project, undertaking, or operation in a scale of 1:50,000 and/or another appropriate scale. Layout of land use of the project, undertaking, or operation, with appropriate directions and scale, shall also be included.

(3) Current Environmental Situation: shall demonstrate the details along with photographs of natural resources, physical and biological environment, value to human beings, utilization, and value to life quality, as well as information dissemination to people in the locality, and public consultations with people and relevant agencies from the start of providing the report so as to bring opinions and current problems into provision of the report. Environmental maps and land utilization outside the premises that may be impacted by the operation both in a short and long run shall also be shown.

(4) Environmental Impact Assessment: shall emphasize importance on significant environmental impacts that may arise from the project, undertaking, or operation which directly or indirectly impacts natural resources and environment and different values under (3).

(5) Environmental Impact Prevention and Correction Measures and Environmental Impact Monitoring Measures: shall at least consist of the following key substances:

(a) details of measures to prevent and rectify environmental impacts, established from an assessment of environmental impact under (4) and in case where damages are unavoidable, measures to compensate and remedy such damages shall also be additionally included;

(b) details of measures to monitor environmental impacts that are academically proper and practicable and consistent with the environmental impact prevention and correction measures for the project, undertaking, or operation;

(c) summary table of important environmental impacts: as well as environmental impact prevention and correction measures and environmental impact monitoring measures.

(6) Components Attached to Initial Environmental Impact Report: e. g, list of references such as pictures and layouts or plans used in initial environmental impact assessment; annexes such as calculations, sample of questionnaires, photographs of interviews with relevant people, and research outcome that helps enhance understandings in providing an environmental impact assessment report.

(7) The operator or person asking for permission shall submit an initial environmental impact report using the format indicated in (1)-(6) and shall attach the following required documents:

(a) one original copy of the initial environmental impact report and at least 14 copies of duplicate;

(b) item list showing important environmental impacts, environmental impact prevention and correction measures, and environmental impact monitoring measures, pursuant to SP1 Form;

(c) front and inside covers of the initial environmental impact report pursuant to SP2 Form;

(d) certificate document for the initial environmental impact report pursuant to SP3 Form;

(e) name list of providers of the initial environmental impact report pursuant to SP4 Form;

(f) demonstration of submission details of the initial environmental impact report pursuant to SP5 Form;

(g) a duplicate copy of license of a person having a right to provide environmental impact assessment reports.

No. 8: An environmental impact assessment report under No. 6 (2) shall consist of the following key substances:

(1) The main report shall comprise the followings:

(a) Introduction: shall demonstrate background, objectives, rationales and necessities, scope of the study, methodology, as well as location alternatives and/or methodology alternatives, which shall be consistent with objectives of and how to implement the project, undertaking, or operation. Reasons and decisions made in choosing those proposed alternatives shall also be specified.

(b) Project Details: shall contain the details that can clearly demonstrate an overall picture of the project, undertaking, or operation, namely, types, sizes, implementation methods, component activities, and location of the project, undertaking, or operation, with photographs and maps showing the location as well as photographs and maps showing environmental components in the areas that may be impacted by the project, undertaking, or operation in a scale of 1:50,000 and/or another appropriate scale. Layout of land use of the project, undertaking, or operation, with appropriate directions and scale, shall also be included.

(c) Current Environmental Situation: shall demonstrate the details with photographs of natural resources, physical and biological environment, value to human beings' utilization, and value to life quality. There shall be details of the study outcome regarding economic and social aspects and public participation, as well as current problems. Environmental maps and land utilization outside the premises that may be impacted by the operation both in a short and long run shall also be shown. How to organize public consultations for the project, undertaking, or operation shall be in accordance with guidelines prescribed in the Office of Natural Resources and Environmental Policy and Planning's notification.

(d) Environmental Impact Assessment: shall specify environmental impacts and assess them in every aspect that will occur due to implementation of the project, undertaking, or operation, which directly or indirectly impacts natural resources and environment and different values under (c). Assessments of alternatives to implementing the project, undertaking, or operation and of impacts that may happen under all alternatives shall also be provided.

(e) Environmental Impact Prevention and Correction Measures and Environmental Impact Monitoring Measures: shall at least consist of the following key substances:

1) details of measures to prevent and rectify environmental impacts, established from an assessment of environmental impact under (d) and in case where damages are unavoidable, measures to compensate and remedy such damages shall also be additionally included;

2) details of measures to monitor environmental impacts that are academically proper and practicable and consistent with the environmental impact prevention and correction measures. They shall be deemed part of monitoring after implementation of that project, undertaking, or operation;

3) details of environmental impact prevention and correction measures and environmental impact monitoring measures that were implemented in case where it is the project, undertaking, or operation that was previously in operation.

4) summary table of important environmental impacts: as well as environmental impact prevention and correction measures and environmental impact monitoring measures. An action plan for each aspect of the measures may be submitted for completeness.

(2) Components Attached to Environmental Impact Assessment Report: e.g, list of references such as a sample collection report, an analysis report on environmental quality sample, pictures and layouts or plans used in environmental impact assessment; annexes such as calculations, sample of questionnaires, photographs of interviews with relevant people, and research outcome that helps enhance understandings in providing an environmental impact assessment report.

(3) For the project, undertaking, or operation of a state agency or which a state agency jointly implements with a private sector, the operator, person asking for permission, or state agency who is owner of the project, undertaking, or operation, shall provide a summary report with at least key substances, namely, (a) introduction, (b) brief details of the project, undertaking, or operation with the same content as that in the main report, and (c) summary table of important environmental impacts along with environmental impact prevention and correction measures and environmental impact monitoring measures.

(4) The operator, person asking for permission, or state agency who is owner of the project, undertaking, or operation, shall submit an environmental impact assessment report using the format indicated in (1)-(2) or (1)-(3) as the case may be, and shall attach the following required documents:

(a) one original copy of the main report under (1) and at least 14 copies of duplicate;

(b) in case of a project, undertaking, or operation of a state agency or which a state agency jointly implements with a private sector which shall have a summary report under (3), the operator, person asking for permission, or state agency who is owner of the project, undertaking, or operation, shall also submit one original copy of the summary report;

(c) item list showing important environmental impacts, environmental impact prevention and correction measures, and environmental impact monitoring measures, pursuant to SP1 Form;

(d) front and inside covers of the environmental impact assessment report pursuant to SP6 Form;

(e) certificate document for the environmental impact assessment report pursuant to SP7 Form;

(f) name list of providers of the environmental impact assessment report pursuant to SP8 Form;

(g) demonstration of submission details of the environmental impact assessment report pursuant to SP9 Form;

(h) a duplicate copy of license of a person having a right to provide environmental impact assessment reports.

No. 9: In addition to the original and duplicate copies of the report, a copy of attachments and format of the report which the operator, person asking for permission, or state

agency who is owner of the project, undertaking, or operation must provide and submit under No.7 and No. 8, that operator, person asking for permission, or state agency who is owner of the project, undertaking, or operation shall also have a duty to submit documents, layouts, maps, or pictures to be used in the process of examining accuracy of documents; as well as statistical information used in providing a report of an official of the Office of Natural Resources and Environmental Policy and Planning or the state agency assigned by the Office of Natural Resources and Environmental Policy and Planning to consider environmental impact assessment reports for each project, undertaking, or operation as the case may be. This shall be as prescribed in the notification of Secretary-General of the Office of Natural Resources and Environmental Policy and Planning.

Document submissions under paragraph one shall not at all relate to the case where each expert committee has a resolution to require the operator, person asking for permission, or state agency who is owner of the project, undertaking, or operation, to submit additional documents/information for its consideration process in giving opinions to the report.

No. 10: Submission of an initial environmental impact report or environmental impact assessment report under No. 6 shall be proceeded under the following procedure:

(1) in case of a project, undertaking, or operation of a state agency or which a state agency jointly implements with a private sector that shall require the Cabinet's approval according to governmental rules and regulations, the state agency responsible for such project, undertaking, or operation shall submit the report before requesting for the Cabinet's approval;

(2) in case of a project, undertaking, or operation of a state agency which is not required to acquire the Cabinet's approval or a legal permission, an official of the state agency responsible for such project, undertaking, or operation shall submit the report at the stage of applying for an authorization of the project or annual budget from chief of the state agency, as the case may be;

(3) in case of a project, undertaking, or operation of a private sector which is required a legal permission, the operator or person asking for permission shall submit the report in accordance with the procedure prescribed in the tables appeared in Annexes 5 and 6.

No. 11: An initial environmental impact report or an environmental impact assessment report under No. 6 shall be provided by a person granted a license to have a right to provide environmental impact assessment reports.

No. 12: In case where the operator, person asking for permission, or state agency who is owner of the project, undertaking, or operation, submits an environmental impact assessment report to an expert committee for a reconsideration under Section 51/1, paragraphs two and four of the Enhancement and Conservation of National Environmental Quality Act B.E. 2535 as amended by the Enhancement and Conservation of National Environmental Quality Act (No. 2) B.E. 2561 and it is a continuous consideration after the previous one is concluded, statistical information collection, environmental quality information survey, public consultations, environmental impact assessment to be partly or wholly provided, shall be in accordance with a resolution of each expert committee and such resolution of the expert committee shall be final.

No. 13: In case where the notifications specifying areas to implement environmental protection measures issued under Section 45 the Enhancement and Conservation of National Environmental Quality Act B.E. 2535 do not stipulate of which projects, undertakings, or operations are specifically required to provide an environmental impact assessment report, the

types of projects, undertakings, or operations as indicated in this Notification shall apply to those areas implementing environmental protection measures as abovementioned.

No. 14: The operator, person asking for permission, or chief or acting chief of the state agency responsible for a project, undertaking, or operation, shall submit an environmental impact assessment report under No. 7 and No. 8 to the Office of Natural Resources and Environmental Policy and Planning or the agency assigned by the Office of Natural Resources and Environmental Policy and Planning, who shall be deemed accurately and completely accepting the report on the date of affixing seal on the documents.

Chapter 3

Transitional Provisions:

No. 15: Those environmental impact analysis reports submitted before this Notification becomes effective and still under an expert committee's consideration, such consideration process shall proceed until the expert committee has a resolution which renders the process concluded.

No. 16: This Notification shall come into force after one day as from the date of its publication in the Government Gazette.

Notified on 19 November B.E. 2561

General Surasak Karnjanarat,
Minister of National Resources and Environment

Annex 1

25 Main River Basins of Thailand

1. Salawin River Basin
2. Khong River Basin
3. Kok River Basin
4. Chi River Basin
5. Mun River Basin
6. Ping River Basin
7. Wang River Basin
8. Yom River Basin
9. Nan River Basin
10. Chao Phraya River Basin
11. Sakae Krang River Basin
12. Pasak River Basin
13. Thachin River Basin
14. Mae Klong River Basin
15. Prachin Buri River Basin
16. Bang Pakong River Basin
17. Thole Sap Basin
18. East-Coast Gulf Basin
19. Petchaburi River Basin
20. West-Coast Gulf Basin
21. Peninsula-East Coast Basin
22. Tapi River Basin
23. Thale Sap Songkhla Basin
24. Pattani River Basin
25. Peninsula-West Coast Basin

Annex 2

23 Principal Rivers of Thailand

1. Yuam River
2. Songkram River
3. Kok River
4. Chi River
5. Mun River
6. Ping River
7. Wang River
8. Yom River
9. Nan River
10. Chao Praya River
11. Sakae Krang River
12. Pasak River
13. Tachin River
14. Mae Klong River
15. Prachin Buri River
16. Bang Pakong River
17. Chantaburi River
18. Petchaburi River
19. Pranburi River
20. Saiburi River
21. Tapi River
22. Pattani River
23. Trang River

Annex 3
Projects, Undertakings, or Operations Required to Provide
an Initial Environmental Impact Report

No.	Type of Projects, Undertakings, or Operations	Size
1.	Other mining types than those specified to require to provide an environmental impact assessment report under Annex 4 but not including the following mining types: (1) glass sand or silica sand mining; (2) cement clay mining; (3) stained clay mining; (4) marl mining; (5) ball clay mining; (6) fire clay mining; (7) diatomite mining.	All sizes
2.	Seaplane bases (Water airports)	All sizes

Annex 4

**Projects, Undertakings, or Operations Required to Provide
an Environmental Impact Assessment Report**

No.	Type of Projects, Undertakings, or Operations	Size
1.	<p>Mining under the law on minerals:</p> <p>1.1 mining types as follows:</p> <p>1.1.1 coal mining;</p> <p>1.1.2 potash mining;</p> <p>1.1.3 rock salt mining;</p> <p>1.1.4 limestone quarry for cement industry;</p> <p>1.1.5 all types of metal mining;</p> <p>1.2 underground mining;</p> <p>1.3 mining types using explosives;</p> <p>1.4 all mining types located in the following areas:</p> <p>1.4.1 Class 1 Watershed Area designated by the Cabinet resolution;</p> <p>1.4.2 additional conservation forests designated by the Cabinet resolution;</p> <p>1.4.3 Ramsar Site;</p> <p>1.4.4 area within 2 kilometers from an ancient monument, archaeological site, historical site or historical park under the laws on ancient monuments, antiques, objet d'art and national museums, or a world heritage site inscribed on the World Heritage List according to the World Heritage Convention</p>	All sizes
2.	<p>Petroleum development under the law on petroleum</p> <p>2.1 petroleum exploration by drilling;</p> <p>2.2 petroleum production.</p>	All sizes
3.	<p>Petroleum and fuel pipeline transportation system, except:</p> <p>(1) onshore natural gas pipeline transportation system of which a maximum operating pressure is less than or equal to twenty bars and a pipeline diameter is less than or equal to sixteen inches for the entire project, in any area, except for the areas where the Cabinet resolution or the specific laws specify otherwise;</p> <p>(2) onshore natural gas pipeline transportation system of which a maximum operating pressure is more than twenty bars or a pipeline diameter is more than sixteen inches, which is entirely located in an industrial estate under the law on Industrial Estate Authority of Thailand</p>	All sizes
4.	<p>Industrial estate under the law on Industrial Estate Authority of Thailand or other similar projects or projects of land allocation for industrial development</p>	All sizes
5.	<p>Petrochemical industry using chemical process in production</p>	Production capacity of 100 tons per day or more
6.	<p>Petroleum refining industry</p>	All sizes
7.	<p>Natural gas separation industry or natural gas reforming industry</p>	All sizes

No.	Type of Projects, Undertakings, or Operations	Size
8.	<p>Chlor-alkali industry and industry using chlorine (Cl₂) or hydrogen chloride (HCl) as follows:</p> <p>8.1 chlor-alkali industry using sodium chloride (NaCl) as a raw material to produce the production of chlorine (Cl₂), sodium hydroxide (NaOH), sodium hypochlorite (NaOCl), hydrochloric acid (HCl), sodium carbonate (Na₂CO₃) and bleaching powder;</p> <p>8.2 industry using chlorine or hydrogen chloride as a raw material to produce the production of sodium hypochlorite (NaOCl), hydrochloric acid (HCl), sodium carbonate (Na₂CO₃) and bleaching powder</p>	Production capacity of each product, or combined, of 100 tons per day or more
9.	Cement industry	All sizes
10.	Pulp industry	Production capacity of 50 tons per day or more
11.	Industry producing active ingredient or pesticide using chemical process in production	All sizes
12.	Chemical fertilizer industry using chemical process in production	All sizes
13.	<p>Sugar industry as follows:</p> <p>18.1 Producing raw sugar, white sugar or refined sugar;</p> <p>18.2 Producing glucose, dextrose, fructose or other similar products</p>	<p>All sizes</p> <p>Production capacity of 20 tons per day or more</p>
14.	Iron or steel industry	Production capacity of each product, or combined, of 100 tons per day or more
15.	Metallic mineral smelting or dressing or metal melting, other than the iron or steel industry	Production capacity of 50 tons per day or more
16.	<p>Industry producing liquor, alcohol, including beer and wine:</p> <p>16.1 liquor and alcohol industry;</p> <p>16.2 wine industry;</p> <p>16.3 beer industry.</p>	<p>Production capacity of 40,000 litres per month or more (calculated at 28 degrees)</p> <p>Production capacity of 600,000 litres per month or more</p> <p>Production capacity of 600,000 litres per month or more</p>
17.	Central waste treatment plant only for industrial waste under the law on factory	All sizes
18.	<p>All types of thermal power plants, except waste-to-energy plants. Waste-to-energy plants that are exempted shall not be located in the following areas:</p> <p>18.1 Class 1 or Class 2 Watershed Area designated by the Cabinet resolution;</p> <p>18.2 environmentally protected area under a Notification of Ministry of Natural Resources and Environment;</p> <p>18.3 conservation forest areas under the Cabinet resolution;</p> <p>18.4 Ramsar Site designated by the Cabinet resolution;</p>	Productivity of electricity of 10 megawatts or more

No.	Type of Projects, Undertakings, or Operations	Size
	18.5 areas where air pollution level exceeds 80 percent of the National Ambient Air Quality Standards.	
19.	Expressway system under the law on Expressway Authority of Thailand or other similar projects	All sizes
20.	Highway or road as defined by the law on highways , passing through the following areas: 20.1 wildlife sanctuaries or non-hunting areas under the law on wildlife conservation and protection; 20.2 national parks under the law on national parks; 20.3 Class 2 Watershed Area designated by the Cabinet resolution; 20.4 mangrove forest areas designated as national forests; 20.5 coastal areas within 50 meters of the highest natural sea-level rise; 20.6 areas in or within 2 kilometers from Ramsar Site or world heritage site inscribed on the World Heritage List according to the World Heritage Convention; 20.7 areas within 1 kilometer from an ancient monument, archaeological site, historic site or historic park under the laws on ancient monuments, antiques, objet d' art and national museums, except for those town planning roads under the law on town planning.	All sizes
21.	Rail mass transit system	All sizes
22.	Ports	Capacity for vessels of 500 gross tons or more; quay length of 100 meters or more; or total port area of 1,000 square meters or more
23.	Recreational ports	Capacity for 50 vessels or more or total port area of 1,000 square meters or more
24.	Land fill in seas	Lower than 300 rai
25.	Construction or expansion of a structure around or in the sea: 25.1 groin, jetty, and training wall; 25.2 offshore breakwater.	All sizes
26.	Aviation transportation system only for construction or expansion of airports or temporary takeoff and landing areas for commercial planes;	Runway length of 1,100 meters or more
27.	High-rise or specially large buildings under the law on building control with the locations or utilization purposes as follows: 27.1 located adjacent to a riverbank as indicated in Annex 2, seashore, lake, or beach, or near or in a national park or historical park, which may impact environmental quality; 27.2 buildings used for retail or wholesale business 27.3 buildings used as an office or place of business of a private sector.	Height of 23.00 meters or more; or total floor area of all floors or of each individual floor area in the same building of 10,000 square meters or more

No.	Type of Projects, Undertakings, or Operations	Size
28.	Land allocation for residential or commercial purposes under the law on land development	500 land plots or more or total allocated area of more than 100 rai
29.	Hospitals or sanatoriums under the law on sanatoriums 29.1 In case of being located close to a river as indicated in Annex 2; within 50 metres from seashore, lake or beach; 29.2 other types not specified in 29.1	30 in-patient beds or more 60 in-patient beds or more
30.	Hotels or resorts under the law on hotels	80 units or more or usable area of 4,000 square meters or more
31.	Residential building under the law on building control	80 units or more or usable area of 4,000 square meters or more
32.	Irrigation	Irrigated area of 80,000 rai or more
33.	All types of projects located in the Class 1 Watershed Area designated by the Cabinet resolution	All sizes
34.	Transbasin diversion as follows: 34.1 transbasin diversion of main river basins, with an exception of temporary diversion in the case of a disaster or where there is an impact on national security; 34.2 international transbasin diversion, with an exception of temporary diversion in the case of a disaster or where there is an impact on national security.	All sizes
35.	Sluice gate in principal rivers	All sizes

Annex 5

Stage for Submission of an Initial Environmental Impact Report

No.	Types of Projects, Undertakings, or Operations	Stage
1.	Other mining types than those specified to require to provide an environmental impact assessment report under Annex 4 but not including the following mining types: (1) glass sand or silica sand mining; (2) cement clay mining; (3) stained clay mining; (4) marl mining; (5) ball clay mining; (6) fire clay mining; (7) diatomite mining	when applying for a mining concession
2.	Seaplane bases	when applying for establishment or aircraft takeoff-landing permission, as the case may be

Annex 6

Stage for Submission of an Environmental Impact Assessment Report

No.	Types of Projects, Undertakings, or Operations	Stage
1.	<p>Mining under the law on minerals:</p> <p>1.1 mining types as follows:</p> <p>1.1.1 coal mining;</p> <p>1.1.2 potash mining;</p> <p>1.1.3 rock salt mining;</p> <p>1.1.4 limestone quarry for cement industry;</p> <p>1.1.5 all types of metal mining;</p> <p>1.2 underground mining;</p> <p>1.3 mining types using explosives;</p> <p>1.4 all mining types located in the following areas:</p> <p>1.4.1 Class 1 Watershed Area designated by the Cabinet resolution;</p> <p>1.4.2 additional conservation forests designated by the Cabinet resolution;</p> <p>1.4.3 Ramsar Site;</p> <p>1.4.4 area within 2 kilometers from an ancient monument, archaeological site, historical site or historical park under the laws on ancient monuments, antiques, objet d'art and national museums, or a world heritage site inscribed on the World Heritage List according to the World Heritage Convention</p>	when applying for a mining concession
2.	<p>Petroleum development under the law on petroleum</p> <p>2.1 petroleum exploration by drilling;</p> <p>2.2 petroleum production.</p>	when applying for approval from a competent or permitting agency
3.	<p>Petroleum and fuel pipeline transportation system, except:</p> <p>(1) onshore natural gas pipeline transportation system of which a maximum operating pressure is less than or equal to twenty bars and a pipeline diameter is less than or equal to sixteen inches for the entire project, in any area, except for the areas where the Cabinet resolution or the specific laws specify otherwise;</p> <p>(2) onshore natural gas pipeline transportation system of which a maximum operating pressure is more than twenty bars or a pipeline diameter is more than sixteen inches, which is entirely located in an industrial estate under the laws on Industrial Estate Authority of Thailand</p>	when applying for a permit or approval from a competent agency, as the case may be
4.	<p>Industrial estate under the law on Industrial Estate Authority of Thailand or other similar projects or projects of land allocation for industrial development</p>	when applying for authorization or permission of the project, as the case may be
5.	<p>Petrochemical industry using chemical process in production</p>	when applying for permission for construction or operation, as the case may be
6.	<p>Petroleum refining industry</p>	when applying for permission for construction or operation, as the case may be

No.	Types of Projects, Undertakings, or Operations	Stage
7.	Natural gas separation industry or natural gas reforming industry	when applying for permission for construction or operation, as the case may be
8.	Chlor-alkali industry and industry using chlorine (Cl₂) or hydrogen chloride (HCl) as follows: 8.1 chlor-alkali industry using sodium chloride (NaCl) as a raw material to produce the production of chlorine (Cl ₂), sodium hydroxide (NaOH), sodium hypochlorite (NaOCl), hydrochloric acid (HCl), sodium carbonate (Na ₂ CO ₃) and bleaching powder; 8.2 industry using chlorine or hydrogen chloride as a raw material to produce the production of sodium hypochlorite (NaOCl), hydrochloric acid (HCl), sodium carbonate (Na ₂ CO ₃) and bleaching powder	when applying for permission for construction or operation, as the case may be
9.	Cement industry	when applying for permission for construction or operation, as the case may be
10.	Pulp industry	when applying for permission for construction or operation, as the case may be
11.	Industry producing active ingredient or pesticide using chemical process in production	when applying for permission for construction or operation, as the case may be
12.	Chemical fertilizer industry using chemical process in production	when applying for permission for construction or operation, as the case may be
13.	Sugar industry as follows: 13.1 Producing raw sugar, white sugar or refined sugar; 13.2 Producing glucose, dextrose, fructose or other similar products	when applying for permission for construction or operation, as the case may be
14.	Iron or steel industry	when applying for permission for construction or operation, as the case may be
15.	Metallic mineral smelting or dressing or metal melting, other than the iron or steel industry	when applying for permission for construction or operation, as the case may be
16.	Industry producing liquor, alcohol, including beer and wine: 16.1 liquor and alcohol industry; 16.2 wine industry; 16.3 beer industry.	when applying for permission for construction or operation, as the case may be
17.	Central waste treatment plant only for industrial waste under the law on factory	when applying for permission for construction or operation, as the case may be

No.	Types of Projects, Undertakings, or Operations	Stage
18.	<p>All types of thermal power plants, except waste-to-energy plants. Waste-to-energy plants that are exempted shall not be located in the following areas:</p> <p>18.1 Class 1 or Class 2 Watershed Area designated by the Cabinet resolution;</p> <p>18.2 environmentally protected area under a Notification of Ministry of Natural Resources and Environment;</p> <p>18.3 conservation forest areas under the Cabinet resolution;</p> <p>18.4 Ramsar Site designated by the Cabinet resolution;</p> <p>18.5 areas where air pollution level exceeds 80 percent of the National Ambient Air Quality Standards.</p>	when applying for permission for construction or operation, as the case may be
19.	Expressway system under the law on Expressway Authority of Thailand or other similar projects	when applying for authorization or permission of the project, as the case may be
20.	<p>Highway or road as defined by the law on highways, passing through the following areas:</p> <p>20.1 wildlife sanctuaries or non-hunting areas under the law on wildlife conservation and protection;</p> <p>20.2 national parks under the law on national parks;</p> <p>20.3 Class 2 Watershed Area designated by the Cabinet resolution;</p> <p>20.4 mangrove forest areas designated as national forests;</p> <p>20.5 coastal areas within 50 meters of the highest natural sea-level rise;</p> <p>20.6 areas in or within 2 kilometers from Ramsar Site or world heritage site inscribed on the World Heritage List according to the World Heritage Convention;</p> <p>20.7 areas within 2 kilometers from an ancient monument, archaeological site, historic site or historic park under the laws on ancient monuments, antiques, objet d' art and national museums, except for those town planning roads under the law on town planning.</p>	when applying for authorization or permission of the project, as the case may be
21.	Rail mass transit system	when applying for authorization or permission of the project, as the case may be
22.	Ports	when applying for authorization or permission of the project, as the case may be
23.	Recreational ports	when applying for authorization or permission of the project, as the case may be
24.	Land fill in seas	when applying for authorization or permission of the project, as the case may be

No.	Types of Projects, Undertakings, or Operations	Stage
25.	Construction or expansion of a structure around or in the sea: 25.1 groin, jetty, and training wall; 25.2 offshore breakwater.	when applying for authorization or permission of the project, as the case may be
26.	Aviation transportation system only for construction or expansion of airports or temporary takeoff and landing areas for commercial planes;	when applying for authorization or permission of the project, as the case may be
27.	High-rise or specially large buildings under the law on building control with the locations or utilization purposes as follows: 27.1 located adjacent to a riverbank as indicated in Annex 2, seashore, lake, or beach, or near or in a national park or historical park, which may impact environmental quality; 27.2 buildings used for retail or wholesale business 27.3 buildings used as an office or place of business of a private sector.	when applying for a construction permit; or when notifying the local competent official, in the case of notifying a local competent official under the law on building control without applying for a permit, as the case may be
28.	Land allocation for residential or commercial purposes under the law on land allocation	when applying for a land allocation permit under the law on land allocation
29.	Hospitals or sanatoriums under the law on sanatoriums 29.1 In case of being located close to a river as indicated in Annex 2; within 50 metres from seashore, lake or beach; 29.2 other types not specified in 29.1	when applying for a construction permit; or when notifying the local competent official, in the case of notifying a local competent official under the law on building control without applying for a permit, as the case may be
30.	Hotels or resorts under the law on hotels	when applying for a construction permit; or when notifying the local competent official, in the case of notifying a local competent official under the law on building control without applying for a permit, as the case may be
31.	Residential building under the law on building control	when applying for a construction permit; or when notifying the local competent official, in the case of notifying a local competent official under the law on building control without applying for a permit, as the case may be
32.	Irrigation	when applying for authorization or permission of the project, as the case may be

No.	Types of Projects, Undertakings, or Operations	Stage
33.	All types of projects located in the Class 1 Watershed Area designated by the Cabinet resolution	when applying for authorization or permission of the project, as the case may be
34.	Transbasin diversion as follows: 34.1 transbasin diversion of main river basins, with an exception of temporary diversion in the case of a disaster or where there is an impact on national security; 34.2 international transbasin diversion, with an exception of temporary diversion in the case of a disaster or where there is an impact on national security.	when applying for authorization or permission of the project, as the case may be
35.	Sluice gate in principal rivers	when applying for authorization or permission of the project, as the case may be

**Item List Showing Important Environmental Impacts,
Environmental Impact Prevention and Correction Measures, and
Environmental Impact Monitoring Measures**

Project Name:

Environmental Components and Different Values	Important Environmental Impacts	Environmental Impact Prevention and Correction Measures	Environmental Impact Monitoring Measures
Physical Environment Resources			
Biological Environment Resources			
Value to Human Beings' Utilization			
Value to Life Quality			

Initial Environmental Impact Report

Project Name:

Location:

Project Owner:

Address of Project Owner:

Assignment of Power:

- Project owner delegates his/her power to
to submit the report as indicated in the attached power of attorney.
- Project owner does not delegate his/her power to any person.

Provided by

.....

(Provider of Initial Environmental Impact Report)

Certificate for Initial Environmental Impact Report

Date.....Month.....B.E.....

The document certifies thatis a provider of an initial environmental impact report of the project... .. for... .. for the purpose of.....under the application number.....with the natural person holding a right to provide reports and co-provider(s) of the report as follows:

Natural person holding a right to provide reports

Signature

.....

.....

Co-provider(s) of the report

Signature

.....

.....

.....

.....

.....

.....

.....

(.....)

Position/Title

Name List of Providers of Initial Environmental Impact Report

Project Name:

Name-Surname / Education	Work Topics	Home Address / Current Work Address	Proportion (%) of Work to the Whole Report	Signature

Demonstration of Submission Details of Initial Environmental Impact Report

Project Name:

Location:

Project Owner:

Reasons for Report Submission

- A project required to provide a report under the notification.....
for a project, undertaking, or operation type
- A project being provided a report because of the Cabinet's resolution
regarding.....on (date/month/year).....
(Please attach the relevant Cabinet's resolution(s) and document(s).)
- A project being provided a report according to investment promotion conditions
- Others (Please indicate.).....

Application for Project Authorization/Permission

- This report is provided to attach to an authorization/ permission from
.....(Please indicate name of the agency granting
authorization/ permission) as required by (Act)
Section/Type/No./Order
- This report is provided to attach to a request for the Cabinet's authorization.
- This report is a project that is not required to request for a state agency's
permission nor the Cabinet's authorization.
- This report is a project, undertaking, or operation in an aspect of (Please
indicate.).....which is in an urgent necessity for the benefit
of public interests pursuant to Section 49, paragraph four of the Enhancement and
Conservation of National Environmental Quality (No. 2) B.E. 2561.
- Others (Please indicate.).....

Project Status at the Stage of Report Submission (can indicate more than one option)

- Project construction/implementation has not been started.
- Project construction has been started. (Please indicate date, brief details, and an
administrative order, if any.)
- Project has been implemented.
- Others (Please indicate.).....

Project Status Reported on (date/ month/ year)

Environmental Impact Assessment Report

Project Name:

Location:

Project Owner:

Address of Project Owner:

Assignment of Power:

- Project owner delegates his/her power to
to submit the report as indicated in the attached power of attorney.
- Project owner does not delegate his/her power to any person.

Provided by

.....

(Juristic Person - Provider of Environmental Impact Assessment Report)

Certificate for Environmental Impact Assessment Report

Date.....Month.....B.E.....

The document certifies thatis a provider of an environmental impact assessment report of the project... for... for the purpose of.....under the application number.....with the natural person holding a right to provide reports and co-provider(s) of the report as follows:

Natural person holding a right to provide a report

Signature

.....

.....

Co-provider(s) of the report

Signature

.....

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.....

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(.....)

Position/Title

(Seal of the Juristic Person)

Name List of Providers of Environmental Impact Assessment Report

Project Name:

Name-Surname / Education	Work Topics	Home Address / Current Work Address	Proportion (%) of Work to the Whole Report	Signature

Demonstration of Submission Details of Environmental Impact Assessment Report

Project Name:

Location:

Project Owner:

Reasons for Report Submission

- A project required to provide a report under the notification.....
for a project, undertaking, or operation type
- A project being provided a report because of the Cabinet's resolution
regarding.....on (date/month/year).....
(Please attach the relevant Cabinet's resolution(s) and document(s).)
- Others (Please indicate.).....

Application for Project Authorization/Permission

- This report is provided to attach to an authorization/ permission from
.....(Please indicate name of the agency granting
authorization/ permission) as required by (Act)
Section/Type/No./Order
- This report is provided to attach to a request for the Cabinet's authorization.
- This report is a project that is not required to request for a state agency's
permission nor the Cabinet's authorization.
- This report is a project, undertaking, or operation in an aspect of (Please
indicate.)..... which is in an urgent necessity for the benefit
of public interests pursuant to Section 49, paragraph four of the Enhancement and
Conservation of National Environmental Quality (No. 2) B.E. 2561.
- Others (Please indicate.).....

Project Status at the Stage of Report Submission (can indicate more than one option)

- Project construction/implementation has not been started.
- Project construction has been started. (Please indicate date, brief details, and an
administrative order, if any.)
- Project has been implemented.
- Others (Please indicate.).....

Project Status Reported on (date/ month/ year)