GUIDANCE NOTES FOR COMPLETING FORM 1 OF THE AIR POLLUTION CONTROL (SPECIFIED PROCESSES) REGULATIONS

(Application for a Licence Pursuant to Section 14 of the Air Pollution Control Ordinance)

The purpose of these notes is to assist you to complete Form 1 prescribed in the Air Pollution Control (Specified Processes) Regulations. The notes are for general information only and have no legal effect. Copies of the Air Pollution Control Ordinance and Regulations are available for sale at Government Publication Centre.

- 2. There are four different forms prescribed in the Second Schedule to the Air Pollution Control (Specified Processes) Regulations. They are each for use in different circumstances, as follows:-
 - Form 1: Application for a licence;
 - Form 2: Application for renewal of a licence;
 - Form 3: Application for variation of a licence; or variation or cancellation of any term or condition of an exemption; and
 - Form 4: Application for transfer of a licence.

Please complete Form 1 only if you wish to obtain a new licence under section 14 of the Ordinance to conduct a specified process in your premises. This form is for an application for one process only. If more than one process is to be conducted in the same premises, please use a separate application form for each process.

- 3. A list of all specified processes is given in Annex 1. If you are in doubt whether or not your process is a specified process, please consult the Authority.
- 4. Under section 12 of the Ordinance, the owner of the premises conducting specified process shall use the best practicable means (BPM) for preventing the emission of noxious or offensive emissions from his premises. The Authority has prepared a series of guidance notes on the BPM requirements for various types of specified processes for the applicant to make reference to. The Authority will also use the guidance notes as a guide in the assessment of a licence application.
- 5. Please complete the form in black or blue ink and in block letters. Typewritten applications are acceptable.
- 6. If there is no sufficient space in any column to fill in all the information, you may use separate sheet(s) of paper cross referenced to the particular column clearly marked on the sheet. All the additional sheet(s) of information should be numbered and duly signed by the applicants.
- 7. The completed application form is required to be submitted to the Authority either by hand or by registered post, with an application fee of Hong Kong \$6,740. Please do not send any money through the post. Crossed cheque should be made payable to the "The Government of the Hong Kong Special Administrative Region". Payment through EPS or Faster Payment System ("FPS") is also available at the Regional Offices (ROs) of the Environmental Protection Department (EPD) listed in Annex 3.
- 8. You can obtain copies of the form, guidance notes on the BPM requirements and further assistance from the Authority at any of the Regional Offices of the Environmental Protection Department. Their office addresses, telephone numbers and control districts are listed in Annex 3.
- 9. The following notes may help you to complete Form 1:
- 9.1 Paragraph 1

This paragraph shall be signed by the applicant, who must be the owner or one of the owners of the premises where the specified process is to be conducted.

9.2 Paragraph 2

Owner

: Owner includes any lessee or occupier of the premises, and any person carrying on any specified process on or in the premises. If there is more than one owner, please list them all. For a registered company, please give the name of the company as registered under the Companies Ordinance.

Status

: Please indicate the status of the owner, i.e., whether he is the lessee, occupier, or a person carrying on the specified process, by using the codes "L", "O" and "P" respectively.

9.3 Paragraph 3

All plans and specifications submitted with or in relation to the application shall be provided and prepared by a qualified engineer or an authorized person. Please enter the personal name(s) of the qualified engineer(s)/authorized person(s).

Qualified Engineer

: Qualified engineer means a registered professional engineer in the building services, gas, chemical, marine or mechanical engineering disciplines under the Engineers Registration Ordinance (Cap.409).

Authorized Person

: Authorized person means a person whose name is for the time being on the authorized persons' register kept under section 3(1) of the Buildings Ordinance (Cap. 123) as an architect therein; or as an engineer therein; or as a surveyor therein.

9.4 Paragraph 4

Name of the Premises

: Please enter the name of the factory, company or enterprise under which the specified process is being carried out on the premises. Please use the same name as registered under the Business Registration Ordinance.

Contact Person in the Premises

: Please enter the name of the designated person in the specified process works who knows about the process and is authorized to supply information about the process.

Land Status

: Please state under which form of agreement the premises are occupied. For example, a lease, licence, or a deed or memorandum of appropriation. Please provide separately any documental evidence and/or the grant number of the lease. If the premises are leased in the form of Short Term Waiver, or Short Term Tenancy, please provide also a copy of the document showing the basic terms and special conditions attached to the waiver or tenancy agreement.

Nature of Tenure

: Please state whether you will occupy and own, occupy but not own, or own but not occupy the premises to be used for the specified process.

Name of Air Control Zone : If you are in doubt whether or not the premises are located in any of the air control zones, please consult any of the One-stop Shop Offices of the Environmental Protection Department.

9.5 Paragraph 5

Process

Classification of Specified : Please describe the process as listed in Annex 1.

Installed Processing

Capacity

: Please specify the maximum total capacity of the plant/works, even if the equipment for the operation will not be in continuous use or will not always be used at full capacity.

Emission Point

: This includes all emission or discharge outlets, chimneys, ducting and any openings through which noxious or offensive emissions are emitted or are at times emitted, as well as all sources of fugitive emissions.

9.6 Paragraph 6

Noxious or offensive emissions are designated under the Air Pollution Control (Specified Processes) Regulations. A list of these emissions is given at Annex 2.

Emission Point Number : This number is used for identification purposes. For an emission point, the same

unique number must be used whenever reference is made to that emission point.

Exhaust Gas Flowrate : Please give the volumetric flowrate at the actual temperature and pressure of the

emitted exhaust gas while the related plant or equipment is operated at its nominal

design rating.

Exit Temperature : Please give the exit temperature of the exhaust gas at the emission point.

Fugitive Emission : This is the emission which escapes from a process flow stream due to leakage,

materials charging, handling, transfer or storage. Please enter "Yes" even if the

emission will be captured or collected for control.

Discharge or Chimney Height

: Please specify both the discharge or chimney heights above ground level and P.D.. If the emission is not discharged freely upwards, the mode of discharge, such as horizontal or downward discharge, etc., should be specified. If chimney cowls are to be used, the type of cowl (e.g. conical hat and lobster-back cowl) fitted must be

specified.

Exit or Chimney

Cross-section of Discharge : Please specify the dimensions at the outlet of the discharge exit or the chimney.

within 100 m of the

Premises

Highest Building/Structure : Please enter the height and distance of the highest building within 100 m of the corresponding emission point.

Efflux Velocity : Please specify the expected efflux velocity of the exhaust gas at the designed

nominal rating(s) of the related plant or equipment.

: This should bear reference to the list of noxious or offensive emissions given at Composition

Annex 2.

Average Emission Rate : This may be estimated by multiplying the maximum emission rate by the

anticipated load factor of the related plant or equipment.

Average Daily

Concentration

: Please give the average concentration of the emission under normal operation

condition on any typical day.

Maximum Concentration : This means the concentration of the emission in the exhaust stream that will not

be exceeded at any time.

Duration of Maximum

Concentration

: Please give the maximum number of hours in any working day that the

maximum concentration of the noxious or offensive emission may be discharged.

9.7 Paragraph 7

Rated Capacity : Please give the maximum designed heat output of the fuel using equipment.

Type : Please give the type of fuel to be consumed, e.g. pulverised anthracite coal,

industrial fuel oil, industrial diesel oil, liquefied petroleum gas or town gas.

Ash Content : This refers to the maximum fuel ash content in percentage by weight.

Sulphur Content : This refers to the maximum fuel sulphur content in percentage by weight.

Other Specifications : This is applicable if special fuels or some derived fuels are used. Please provide

the full specifications of the fuel including the gross and net calorific values, chemical analysis and density. If you are in doubt, please consult any of the One-

stop Shop Offices of the Environmental Protection Department.

Normal Fuel Consumption: This may be estimated by multiplying the maximum fuel consumption rate by

the anticipated load factor of the equipment.

9.8 Paragraph 8

Type : Please provide the general description of the raw materials and the products, such

as their commercial or generic names.

Nature or General Composition

: Please specify the chemical nature, constituents, composition of the raw materials and products and the proportions of the various constituents.

Description of the Process : Please briefly describe the process and/or the equipment in which the raw

materials are consumed and the products are produced. Use supplementary sheets

if necessary.

Normal Consumption Rate: This should be estimated by multiplying the maximum consumption rate by the

anticipated load factor, and expressed in kilogrammes per hour (kg/h).

Normal Production Rate: This should be estimated by multiplying the maximum production rate by the

anticipated load factor, and expressed in kilogrammes per hour (kg/h).

9.9 Paragraph 9

All plans, drawings or diagrams should be submitted in duplicate and duly signed by a qualified engineer or authorized person. Please note that the Authority may require further plans, drawings or diagrams during the processing of the application if he considers that these are necessary in determining whether or not a licence should be granted.

SPECIFIED PROCESSES

Process Description

1. Acrylates Works

Works in which acrylates are -

- (a) made or purified;
- (b) made and polymerised; or
- (c) purified and polymerised.
- 2. Aluminium Works

Works of the following kinds in which the processing capacity exceeds 1 tonne (expressed as aluminium) or, if the mode of operation is continuous, 0.67 tonne (expressed as aluminium) per hour, and in which -

- (a) aluminium swarf is degreased by the application of heat; or
- (b) aluminium or aluminium alloys are recovered from aluminium or aluminium alloy scrap fabricated metal, swarf, skimmings, or other residues by melting under flux cover; or
- (c) molten aluminium or aluminium alloys are treated by chlorine or its compounds; or
- (d) aluminium is extracted from any compound containing aluminium by a process evolving any noxious or offensive gases; or
- (e) oxide of aluminium is extracted from any ore; or
- (f) aluminium is recovered from slag or drosses; or
- (g) materials used in the above processes or the products thereof are treated or handled by methods which cause noxious or offensive gases to be evolved.
- 3. Cement Works

Works in which the total silo capacity exceeds 50 tonnes and in which cement is handled or in which argillaceous and calcareous materials are used in the production of cement clinker, and works in which cement clinker is ground.

4. Ceramic Works

Works in which the processing capacity exceeds 2 tonnes or, if the mode of operation is continuous, 0.67 tonne per day, and in which any ceramic products including bricks, tiles, pipes, pottery goods, or refractories are manufactured in furnaces or kilns fired by any fuel.

5. Chlorine Works

Works in which chlorine is made or used in any manufacturing process.

6. Copper Works

Works in which the processing capacity exceeds 0.5 tonne (expressed as copper) or, if the mode of operation is continuous, 0.45 tonne (expressed as copper) per hour and in which -

- (a) by the application of heat -
 - (i) copper is extracted from any ore or concentrate or from any material containing copper or its compounds; or
 - (ii) molten copper is refined; or
 - (iii) copper or copper alloy swarf is degreased; or
 - (iv) copper alloys are recovered from scrap fabricated metal, swarf or residues; or
- (b) copper or copper alloys is melted and cast.

7. Electricity Works

Works in which fossil fuel is burnt either wholly or as part of the process of electricity generation where the installed generation capacity of such works exceeds 5 MW.

8. Gas Works

Works in which -

- (a) coal, coke, oil, carbonaceous materials or any mixtures or derivatives of such materials or any waste materials are handled or prepared for carbonization or gasification and in which such materials are carbonized or gasified; or
- (b) natural gas is reformed, refined or odorised.
- 9. Iron and Steel Works

Works in which the installed furnace capacity exceeds 1 tonne, or, if the mode of

operation is continuous, 1 tonne per hour, and in which a ferrous metal melting process for casting is carried out.

10. Metal Recovery Works

Works in which scrap metals are treated in any type of furnace for recovery of metal with a processing capacity exceeding 50 kg per hour, where this is the primary object of the works.

11. Mineral Works

Works in which the processing capacity exceeds 5000 tonnes per annum and in which -

- (a) metallurgical slags; or
- (b) pulverised fuel ash; or
- (c) minerals, other than moulding sand in foundries or coal at electricity works, are subjected to any size reduction, grading or heating by a process giving rise to dust, not being any works described in any other specified process.
- 12. Incinerators

Works in which the installed capacity exceeds 0.5 tonne per hour and which are used for the destruction by burning of wastes or refuse, not being any works described in any other specified process.

13. Petrochemical Works

Works in which the processing capacity exceeds 100 tonnes per annum (expressed as total chemical products), and in which -

- (a) any hydrocarbons are used for the production of olefins or derivatives of olefins; or
- (b) any olefins, derivatives of olefins or mixture of thereof are used in any chemical manufacturing process, not being any works described in any other specified process, or
- (c) any olefins, derivatives of olefins or mixture of thereof are polymerised.
- 14. Sulphuric Acid Works

Works in which the installed capacity exceeds 100 tonnes per annum and in which the manufacture of sulphuric acid is carried on by any process, and works for the concentration or distillation of sulphuric acid.

15. Tar and Bitumen Works

Works of the following kinds in which the installed capacity exceeds 250 kg per hour and in which -

- (a) gas tar or coal tar or bitumen is distilled or is heated in any manufacturing process; or
- (b) any product of the distillation of gas tar or coal tar or bitumen is distilled or heated in any process involving the evolution of any noxious or offensive gas; or
- (c) heated materials produced from gas tar or coal tar or bitumen are applied in coating or wrapping of iron or steel pipes or fittings.

16. Frit Works

Works in which the installed furnace capacity exceeds 1 tonne and in which frit is made by fusion of materials and quenching.

17. Lead Works

Works of the following kinds in which -

- (a) by application of heat -
 - (i) lead is extracted or recovered from any material containing lead or its compounds; or
 - (ii) lead is refined; or
 - (iii) lead is applied as a surface coating to other metals by spraying; or
- (b) compounds of lead are manufactured, extracted, recovered or used in processes which give rise to particulates emission, excluding the manufacture of electric accumulators and the application of glazes or vitreous enamels; or
- (c) organic lead compounds are made.

18. Amines Works

Works in which the processing capacity exceeds 1000 tonnes per annum and in which -

- (a) any methylamine or any ethylamine is made; or
- (b) any methylamine or any ethylamine is used in any chemical process.

19. Asbestos Works

Works in which -

- (a) raw asbestos is milled, ground, opened or blended prior to use in a manufacturing operation; or
- (b) asbestos or any material containing asbestos is used in the manufacture of asbestos cement, or asbestos cement pipes, or asbestos insulating board, or asbestos textiles, or asbestos jointing or packaging materials, or asbestos brake or clutch materials, or asbestos floor coverings, or fillers or reinforcements.
- 20. Chemical Incineration Works Works, not being any works described in any other specified process, of the following kinds in which the installed capacity exceeds 25 kg per hour and which are used for the destruction by burning of -
 - (a) wastes produced from chemical manufacturing processes; or
 - (b) chemical wastes containing combined bromine, chlorine, fluorine, iodine, lead, mercury, cadmium, zinc, nitrogen, phosphorus or sulphur; or
 - (c) wastes produced in the manufacturing of plastics.
- 21. Hydrochloric Acid Works Works in which the installed capacity exceeds 100 tonnes per annum (expressed as hydrochloric acid) where hydrochloric acid gas is evolved either during the preparation of liquid hydrochloric acid or for use in any manufacturing process or as the result of the use of chlorides in a chemical process.
- 22. Hydrogen Cyanide Works

Works in which the installed capacity exceeds 100 tonnes per annum and in which hydrogen cyanide is made or used in any chemical manufacture.

23. Sulphide Works

Works of the following kinds and in which -

- (a) hydrogen sulphide is evolved by the decomposition of metallic sulphide in any manufacturing process; or
- (b) hydrogen sulphide is used in the production of such sulphides; or
- (c) hydrogen sulphide or mercaptans are made or used in any chemical process or evolved as part of any chemical process.
- 24. Pathological Waste Incinerators

Works in which the installed capacity exceeds 50 kg per hour and which are used for the destruction by burning of any medical, hospital or pathological waste, not being any works described in any other specified process.

- 25. Organic Chemical Works Works, not being a chemical process described in any other specified process, of the following kinds in which -
 - (a) the installed capacity exceeds 100 tonnes per annum (expressed as the total organic chemical products), and in which -
 - (i) any organic chemicals, including organic intermediate products, pesticides, fertilisers, and speciality chemicals, are manufactured in any organic chemical process; or
 - (ii) any organic solvent or mixture of solvents is recovered by any thermal process; or
 - (b) any organic liquids, including liquid fuel, are stored in tanks having an installed capacity exceeding 100 m³.
- 26. Petroleum Works

Works in which the processing capacity exceeds 100 tonnes per annum (expressed as petroleum product) and in which -

- (a) crude or stabilised crude petroleum or associated gas, or condensate is-
 - (i) handled or stored; or
 - (ii) refined; or
- (b) any product of such refining is subjected to further refining or to conversion; or
- (c) used lubricating oil is prepared for re-use by any thermal process.
- 27. Zinc Galvanising Works

Works in which the installed capacity exceeds 5000 tonnes per annum (expressed as galvanised product) and in which zinc galvanising is carried out.

28. Rendering Works

Works in which the processing capacity exceeds 250 kg per hour (expressed as the raw material) and in which rendering or reduction or drying through application of heat, or curing by smoking, of animal matter (including feathers, blood, bone, hoof, skin, offal, whole fish, and fish heads and guts and like parts, and organic manures but not including milk or milk products) is carried out.

29. Non-ferrous Metallurgical Works

Works in which the processing capacity exceeds 1 tonne per hour and in which melting of any non-ferrous metal, other than aluminium, copper, lead and zinc for galvanising is carried out.

30. Glass Works

Works in which the processing capacity exceeds 200 tonnes per annum (expressed as the glass products) and in which manufacturing process for making glass or glass products including mineral fibre and glass fibre is carried out.

Noxious of Offensive Emissions

Acrylates
Aldehydes
Amines
Ammonia and its compounds
Asbestos
Bromine and its compounds
Carbon monoxide
Chlorine and its compounds
Cyanogen and its compounds
Fluorine and its compounds
Fumes and dust containing aluminium, antimony, arsenic, beryllium, cadmium, copper, iron, lead, mercury, nickel, tin, vanadium, zinc or their compounds
Fumes or vapours from petrochemical works
Fumes or vapours from gas works
Fumes or vapours from tar and bitumen works
Hydrogen sulphide
Metal or metallic oxide fumes
Oxides and oxyacids of nitrogen
Hydrocarbons
Smoke, soot, grit and dust
Sulphur dioxide and sulphurous acid
Sulphur trioxide and sulphurous acid
Volatile organic sulphur compounds

Environmental Protection Department Regional Offices

地區/地址 Districts / Address	電話 / 傳真 Telephone No. /Fascimile No.
環保署總區辦事處	電話 Tel.
香港灣仔軒尼詩道 130 號修頓中心 28 樓	2835 1018
EPD Territorial Control Office	傳真 Fax
28/F Southorn Centre	2838 2155
130 Hennessy Centre, Wanchai, Hong Kong	
區域辦事處(東)	電話 Tel.
(西貢、觀塘、黃大仙、九龍城和油尖旺)	2755 5518
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