STATUTORY INSTRUMENTS

1965 No. 478 (S. 23)

CLEAN AIR

The Alkali, &c., Works (Scotland) Order 1965

Made - - - -	*15th March* 1965
Laid before Parliament	*23rd March* 1965
Coming into Operation	*1st April* 1965

In exercise of the powers conferred on me by section 1 of the Alkali, &c., Works Regulation (Scotland) Act 1951(a) and of all other powers enabling me in that behalf, after holding an inquiry and after consultation with the local authorities and other interests appearing to me to be concerned, I hereby make the following order:—

1. This order may be cited as the Alkali, &c., Works (Scotland) Order 1965, and shall come into operation on 1st April 1965.

2. The Interpretation Act 1889(b) applies for the interpretation of this order as it applies for the interpretation of an Act of Parliament.

3. The list of noxious or offensive gases mentioned in section 27 of the Alkali, &c., Works Regulation Act 1906(c) (in this order referred to as "the Act of 1906") shall be amended and extended as specified in Schedule 1 to this order.

4. The list of works mentioned in Schedule 1 to the Act of 1906 shall be extended and amended as follows:—

(1) there shall be added to the said list of works the works specified at items (22) to (56) inclusive in Schedule 2 to this order; and

(2) to each of the descriptions in Schedule 1 to the Act of 1906 of the works referred to in column 1 of Schedule 3 to this order there shall be added respectively the words specified in column 2 of the said Schedule 3.

5. The Alkali, &c., Works (Scotland) Order 1952(d) and the Alkali, &c., Works (Scotland) Order 1958(e) are hereby revoked.

William Ross,
One of Her Majesty's Principal Secretaries of State.

St. Andrew's House,
Edinburgh, 1.
15th March 1965.

(a) 14 & 15 Geo. 6. c. 21. (b) 52 & 53 Vict. c. 63. (c) 6 Edw. 7. c. 14.
(d) S.I. 1952/737 (1952 I, p. 126). (e) S.I. 1958/1932 (1958 I, p. 320).

SCHEDULE 1

1. Amendment of the list of noxious or offensive gases in section 27 of the Act of 1906:—

For the words "Chlorine, and its acid compounds" there shall be substituted the words "Chlorine or its compounds".

2. The following additional gases and fumes shall be included within the expression "noxious or offensive gas" in the Act of 1906:—

Acetic acid

Acetic anhydride

Acetylene

Aldehydes

Amines

Ammonia or its compounds

Bromine or its acid compounds

Cadmium or its compounds

Carbon monoxide

Fluorine

Fumaric acid

Iodine or its acid compounds

Maleic acid

Maleic anhydride

Phthalic acid

Phthalic anhydride

Picolines

Pyridine

Products containing hydrogen from the partial oxidation of hydrocarbons

Sulphuric anhydride

Sulphurous anhydride except that arising solely from the combustion of fuel

Volatile organic sulphur compounds

Fumes from benzene works

Fumes from paraffin oil works

Fumes containing aluminium, *beryllium*, calcium, *chromium*, iron, *magnesium, manganese, molybdenum, phosphorus, selenium*, silicon, *sodium, potassium, titanium, tungsten, uranium, vanadium* or their compounds.

SCHEDULE 2

Works

(22) Benzene works, that is to say, works (not being tar works as already defined) in which any wash oil used for the scrubbing of coal gas is distilled, or in which any crude benzol is distilled.

(23) Pyridine works, that is to say, works in which pyridine *or picolines are recovered or* made.

(24) Bromine works, that is to say, works in which bromine is made or is used in any manufacturing operation.

(25) Hydrofluoric acid works, that is to say, works in which hydrofluoric acid is evolved in the manufacture of liquid hydrofluoric acid or its compounds.

(26) Cement production works, that is to say, works in which argillaceous and calcareous materials are used in the production of cement clinker and works in which cement clinker is ground or cement is packed.

(27) Lead works, that is to say, works (*not being works for the recovery of lead from scrap by direct liquation*) in which, by the application of heat, lead is extracted from any material containing lead or its compounds, and works in which compounds of lead are manufactured from metallic lead or its compounds by dry processes which give rise to dust or fume.

(28) Fluorine works, that is to say, works in which fluorine or its compounds with other halogens are made or used in any manufacturing process *and works for the manufacture of fluorides, borofluorides or silicofluorides.*

(29) Acid sludge works, that is to say, works in which acid sludge produced in the refining of coal tar, petroleum or other hydrocarbon derivatives is treated in such manner as to cause the evolution of any noxious or offensive gas.

(30) Iron works and steel works, that is to say, works in which—

(*a*) iron or ferro-alloys are produced in a blast furnace and in which raw materials for use in blast furnaces are handled or prepared ; or

(*b*) iron ores for use in blast furnaces are calcined or sintered ; or

(*c*) iron or steel is melted in air or rotary furnaces fired by coal or oil, or in cupolas employing a heated air blast, or in electric arc furnaces ; or

(*d*) steel is produced, melted or refined in Bessemer, Tropenas, open hearth, or electric arc furnaces ; or

(*e*) oxygen or air enriched with oxygen is used for the refining of iron or for the production, shaping or finishing of steel ; *or*

(*f*) *ferro-alloys are made by processes giving rise to fume.*

(31) Copper works, that is to say, works 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 by processes designed to reduce the zinc content ;* or

(*b*) copper or copper alloy is melted and cast in moulds the internal surfaces of which have been coated with grease-bound or oil-bound dressings: *Provided that this paragraph shall not apply to works in which the aggregate casting capacity does not exceed* 10 *tons per day.*

(32) Aluminium works, that is to say, works in which—

(*a*) aluminium is extracted from any material containing aluminium by a process evolving any noxious or offensive gases ; or

(*b*) oxide of aluminium is extracted from an ore ; or

(*c*) aluminium swarf is degreased by the application of heat ; or

(*d*) aluminium or aluminium alloys are recovered from aluminium or aluminium alloy scrap fabricated metal, swarf, *skimmings, drosses,* or *other* residues by melting ; or

(*e*) aluminium is recovered from slag ; *or*

(*f*) *molten aluminium or aluminium alloys are treated by any process involving the evolution of chlorine or its compounds.*

(33) Electricity works, that is to say, works in which—

(*a*) solid or liquid fuel is burned to raise steam for the generation of electricity for distribution to the general public or for purposes of public transport ; or

(*b*) boilers having an aggregate maximum continuous rating of not less than 450,000 lbs. of steam per hour and normally fired by solid or liquid fuel are used to produce steam for the generation of electricity for purposes other than those mentioned in the preceding paragraph.

(34) Producer gas works, that is to say, works in which producer gas is made from coal and in which raw producer gas is transmitted or used.

(35) Gas and coke works, that is to say, works (not being producer gas works) in which—

(*a*) coal, oil or mixtures of coal or oil with other carbonaceous materials *or products of petroleum refining or natural gas or methane from coal mines or gas derived from fermentation of carbonaceous materials* are handled or prepared for carbonisation or gasification *or reforming* and in which these materials are subsequently carbonised or gasified *or reformed;* or

(*b*) water gas is produced or purified ; or

(*c*) coke or semi-coke is produced and quenched, cut, crushed or graded ; or

(*d*) *gases derived from any process described in paragraph* (*a*) *are subjected to purification processes.*

(36) Ceramic works, that is to say, works in which—

(*a*) *pottery products* (*including domestic earthenware and china, sanitary ware, electrical porcelain, glazed tiles and teapots*) *are made in intermittent kilns fired by coal or oil ;* or

(*b*) heavy clay or refractory goods are fired by coal or oil in

(i) intermittent kilns ; or

(ii) continuous grate-fired kilns *not being tunnel kilns ;* or

(iii) any kiln in which a reducing atmosphere is essential ; *or*

(*c*) *salt glazing of any earthenware or clay material is carried on.*

(37) Lime works, that is to say, works in which calcium carbonate or calcium magnesium carbonate is burned through the agency of coal *or oil.*

(38) Sulphate reduction works, that is to say, works in which metallic sulphates are reduced to the corresponding sulphides by heating with carbonaceous matter.

(39) Caustic soda works, that is to say, works in which—

(*a*) either concentrated solutions of caustic soda or fused caustic soda are produced in vessels heated by coal ; or

(*b*) black liquor produced in the manufacture of paper is calcined in the recovery of caustic soda.

(40) Chemical incineration works, that is to say, works for the destruction by burning of wastes produced in the course of organic chemical reactions which occur during the manufacture of materials for the fabrication of plastics and fibres *and works for the destruction by burning of chemical wastes containing combined chlorine, fluorine, nitrogen, phosphorus or sulphur.*

(41) *Uranium works, that is to say, works* (*not being works licensed under the Nuclear Installations* (*Licensing and Insurance*) *Act* 1959(a), *and not being nuclear reactors or works involving the processing of irradiated fuel therefrom for the purpose of removing fission products*) *in which—*

(*a*) *any ore or concentrate or any material containing uranium or its compounds is treated for the production of uranium or its alloys or its compounds ; or*

(*b*) *any volatile compounds of uranium are manufactured or used ; or*

(*c*) *uranium or its compounds are manufactured, fashioned or fabricated by any dry process giving rise to dust or fume.*

(a) 7 & 8 Eliz. 2. c. 46.

(42) *Beryllium works, that is to say, works in which—*

(*a*) *any ore or concentrate or any material containing beryllium or its compounds is treated for the production of beryllium or its alloys or its compounds; or*

(*b*) *any material containing beryllium or its alloys or its compounds is treated, processed or fabricated in any manner giving rise to dust or fume.*

(43) *Selenium works, that is to say, works in which—*

(*a*) *any ore or concentrate or any material containing selenium or its compounds is treated for the production of selenium or its alloys or its compounds; or*

(*b*) *any material containing selenium or its alloys or its compounds other than as colouring matter, is treated, processed or fabricated in any manner giving rise to dust or fume.*

(44) *Phosphorus works, that is to say, works in which—*

(*a*) *phosphorus is made; or*

(*b*) *yellow phosphorus is used in any chemical or metallurgical process.*

(45) *Ammonia works, that is to say, works in which ammonia is*

(*a*) *made; or*

(*b*) *used in the ammonia-soda process; or*

(*c*) *used in the manufacture of carbonate, nitrate or phosphate of ammonia or urea or nitriles.*

(46) *Hydrogen cyanide works, that is to say, works in which hydrogen cyanide is made or is used in any chemical manufacturing process.*

(47) *Acetylene works, that is to say, works in which acetylene is made and used in any chemical manufacturing process.*

(48) *Amines works, that is to say, works in which methylamine or ethylamine is made.*

(49) *Calcium carbide works, that is to say, works in which calcium carbide is made.*

(50) *Aldehyde works, that is to say, works in which formaldehyde, acetaldehyde or acrolein or the methyl, ethyl or propyl derivatives of acrolein are made.*

(51) *Anhydride works, that is to say, works in which acetic, maleic or phthalic anhydrides or the corresponding acids are made.*

(52) *Chromium works, that is to say, works in which any chrome ore or concentrate is treated for the production therefrom of chromium compounds or chromium metal is made by dry processes giving rise to fume.*

(53) *Magnesium works, that is to say, works in which magnesium or any compound of magnesium is made by dry processes giving rise to fume.*

(54) *Cadmium works, that is to say, works in which metallic cadmium is recovered or cadmium alloys are made or any compound of cadmium is made by dry processes giving rise to fume.*

(55) *Manganese works, that is to say, works in which manganese or its alloys or any compound of manganese is made by dry processes giving rise to fume.*

(56) *Metal recovery works, that is to say, works in which metal is recovered from scrap cable by burning the insulation.*

SCHEDULE 3

EXTENDED DESCRIPTION OF CERTAIN WORKS MENTIONED IN SCHEDULE 1 TO THE ACT OF 1906

Number of Item in Schedule 1 to Act of 1906 and short description of works 1	Words to be added (at end unless otherwise stated) to the description in Schedule 1 to the Act of 1906 2
(1) Sulphuric acid works	"or by any other process involving the use of oxides of nitrogen."
(3) Chemical manure works ...	"and works for the granulating of chemical manures involving the evolution of any noxious or offensive gas."
(5) Nitric acid works	"and works where in the manufacture of any product any acid-forming oxide of nitrogen is evolved."
(8) Muriatic acid works	"or as the result of the use of chlorides in a chemical process."
(9) Sulphide works	"or any works in which sulphuretted hydrogen is evolved as part of a chemical process."
(13) Arsenic works	"and works in which any volatile compound of arsenic is evolved in any manufacturing process *and works in which arsenic is made.*"
(15) Bisulphide of carbon works ...	After the word "manufacture" there shall be added the words "use or recovery".
(18) Paraffin oil works	"and works in which crude petroleum is refined, and works in which any product of the refining of crude shale oil or crude petroleum is treated so as to cause the evolution of gases containing any sulphur compound *and works in which any such product is used in any subsequent chemical manufacturing process not being a process for the polymerisation or co-polymerisation of such products for the manufacture of thermo-plastic materials.*"
(19) Bisulphite works	"and works for the manufacture of liquid sulphur dioxide or of sulphurous acid or of any sulphite and works (not being smelting works as defined in section 8(1) of this Act or other works defined elsewhere in this schedule) in which oxides of sulphur are evolved in any chemical manufacturing process."

Number of Item in Schedule 1 to Act of 1906 and short description of works 1	Words to be added (at end unless otherwise stated) to the description in Schedule 1 to the Act of 1906 2
(20) Tar works	" and works in which any product of the distillation of gas tar or coal tar is distilled or is heated in any manufacturing operation involving the evolution of any noxious or offensive gas."
(21) *Zinc works*	*" and works in which compounds of zinc are made by dry processes giving rise to fume."*

EXPLANATORY NOTE

(This Note is not part of the order, but is intended to indicate its general purport.)

The discharge of certain listed noxious or offensive gases, and of smoke, grit and dust from certain listed types of works is subject to control under the Alkali, &c., Works Regulation Act 1906, as extended by virtue of section 17 of the Clean Air Act 1956. The Alkali, &c., Works Regulation (Scotland) Act 1951 empowers the Secretary of State to make orders extending or amending both the list of gases and the list of works. This order amends and extends these lists and consolidates amendments and extensions made by two previous orders, which are revoked. Italics indicate where changes have been made by this order.