

L.N. 223 of 2001

**ENVIRONMENT PROTECTION ACT, 2001
(ACT NO. XX OF 2001)
FEES ORDINANCE
(CAP. 35)**

Waste from the Titanium Dioxide Industry Regulations, 2001

BY virtue of the powers conferred by article 3, 9, 11 and 28 of the Environment Protection Act, 2001 the Minister for the Environment has made the following regulations:-

1. (1) The title of these regulations is the Waste from the Titanium Dioxide Industry Regulations, 2001.

(2) These regulations shall come into force on such date as the Minister responsible for the environment may by notice in the Gazette appoint, and different dates may be so appointed for different provisions and different purposes of these regulations.

(3) A notice under sub-regulation (2) of these regulations may make such transitional provisions as appear to the Minister to be necessary or expedient in connection with the provisions thereby brought into force.

2. For the purpose of these regulations and unless the context otherwise requires:-

“authorization” means a licence;

“competent authority” means the Department for Environment Protection under the guidance of the Director for Environment Protection and such other body or person as the Minister responsible for the environment may by order in the Gazette prescribe and different bodies or persons may be designated as a competent authority for different provisions and different purposes of these regulations;

“disposal” means:

(a) the collection, sorting, transport and treatment of waste as well as its storage and tipping above ground or underground and its injection into the ground;

(b) the discharge thereof into surface water, ground water and the sea, and dumping at sea;

(c) the transformation operations necessary for its re-use, recovery or recycling;

“environments affected” means the water, the land surface and underground strata and the air in or into which waste from the titanium dioxide industry is discharged, dumped, stored, tipped or injected;

“existing industrial establishments” means those industrial establishments already set up on the date of entry into force of these regulations;

“new industrial establishments” means those industrial establishments which are in the process of being set up on the date of entry into force of these regulations or which are set up after that date. Extensions to existing industrial establishments leading to an increase of 15 000 tonnes per year or more in the titanium dioxide on-site production capacity of the establishment concerned shall be treated as new industrial establishments;

“pollution” means the discharge by man, directly or indirectly, of any residue from the titanium dioxide manufacturing process into the environment, the results of which are such as to cause hazards to human health, harm to living resources and to ecosystems, damage to amenities or interference with other legitimate uses of the environment concerned;

“sampling point” means the point at which samples are taken;

“waste” means:

(a) any residue from the titanium dioxide manufacturing process of which the holder disposes or is obliged to dispose under current national legislation;

(b) any residue from a treatment process of a residue referred to in paragraph (a) above.

3. The competent authority shall ensure the prevention and progressive reduction of pollution caused by waste with a view to its elimination.

4. Waste shall be disposed of without endangering human health and without harming the environment, and in particular:

(a) without risk to water, air, soil and plants, and to animals;

(b) without deleteriously affecting beauty-spots or the countryside.

5. The competent authority shall encourage the prevention, recycling and processing of waste, and any other process for the re-use of waste.

6. (1) The discharge, dumping, storage, tipping and injection of waste shall be prohibited unless prior authorization is issued by the competent authority.

(2) Prior authorization shall also be issued by the competent authority of a State:

- (a) in whose territory the waste is discharged, stored, tipped or injected;
 - (b) from whose territory it is discharged or dumped.
- (3) An authorization may be granted for a limited period only.
- (4) An authorization may be renewed.

7. In the case of discharge or dumping, the competent authority may, in accordance with regulation 4 of these regulations and on the basis of the information supplied in accordance with Annex I to these regulations, grant the authorization referred to in regulation 6 of these regulations provided that:

- (a) the waste cannot be disposed of by more appropriate means;
- (b) an assessment carried out in the light of available scientific and technical knowledge shows that there will be no deleterious effect, either immediate or delayed, on the aquatic environment;
- (c) there is no deleterious effect on boating, fishing, leisure activities, the extraction of raw materials, desalination, fish and shellfish breeding, on regions of special scientific importance or on other legitimate uses of the waters in question.

8. In the case of storage, tipping or injection, the competent authority may, in accordance with regulation 4 of these regulations, and on the basis of the information supplied in accordance with Annex I, grant the authorization referred to in regulation 6 of these regulations, provided that:

- (a) the waste cannot be disposed of by more appropriate means;
- (b) an assessment carried out in the light of available scientific and technical knowledge shows that there will be no detrimental effect, either immediate or delayed, on underground waters, the soil or the atmosphere;
- (c) there is no deleterious effect on leisure activities, the extraction of raw materials, plants, animals, on regions of special scientific importance or on other legitimate uses of the environment in question.

9. (1) Irrespective of the method and extent of treatment of the waste in question, its discharge, dumping, storage, tipping and injection shall be accompanied by the monitoring referred to in Annex II of the waste and of the environment concerned having regard to its physical, chemical, biological and ecological aspects.

(2) The monitoring operations shall be carried out periodically by one or more bodies appointed by the State the competent authority of which has issued the authorization provided for in regulation 6 of these regulations. In the case of cross-frontier pollution between States, the body in question shall be appointed jointly by the parties concerned.

10. (1) The competent authority shall take all appropriate steps to remedy each one of the following situations and, if necessary, shall require the suspension of discharge, dumping, storage, tipping or injection operations:

(a) if the results of the monitoring provided for in Annex II (A) (1) show that the conditions for the prior authorization referred to in regulations 6, 7 and 8 have not been fulfilled, or

(b) if the results of the acute toxicity tests referred to in Annex II (A) (2) show that the limits laid down therein have been exceeded, or

(c) if the results of the monitoring which the competent authority is obliged to carry out on the environment concerned reveal a deterioration in the area under consideration, or

(d) if discharge or dumping produces a deleterious effect on boating, fishing, leisure activities, the extraction of raw materials, desalination, fish and shellfish breeding, on regions of special scientific importance or on other legitimate uses of the waters in question, or

(e) if storage, tipping or injection produces a deleterious effect on leisure activities, the extraction of raw materials, plants, animals, on regions of special scientific importance or on other legitimate uses of the environments in question.

(2) If several States are concerned, the measures shall be taken after consultation.

11. (1) The competent authority shall draw up programmes for the progressive reduction and eventual elimination of pollution caused by waste from existing industrial establishments.

(2) The programmes mentioned in sub-regulation (1) of this regulation shall set general targets for the reduction of pollution from liquid, solid and gaseous waste.

(3) The programmes shall also contain intermediate objectives and information on the state of the environment concerned, on measures for reducing pollution and on methods for treating waste that is directly caused by the manufacturing processes.

12. The programmes referred to in sub-regulation (1) of regulation 11 of these

regulations shall cover all existing industrial establishments and shall set out the measures to be taken in respect of each of them.

13. New industrial establishments shall be subject to applications for prior authorization made to the competent authority. Such authorizations shall be preceded by environmental impact assessments. They shall be granted only to firms which give an undertaking to use only such of the materials, processes and techniques available on the market as are least damaging to the environment.

14. The procedures for the surveillance and monitoring of environments concerned by waste from the titanium dioxide industry mentioned in regulation 9 shall be regulated by the provisions of regulations 14 to 21 of these regulations.

15. At intervals of three years the competent authority shall prepare a report on the implementation of these regulations.

16. (1) The parameters applicable for the surveillance and monitoring referred to in regulation 14 of these regulations are specified in Annexes III to VII of these regulations.

(2) Where a parameter appears in the “mandatory determination” column in the Annexes III to VII of these regulations, sampling and analysis of the samples shall be carried out in respect of the environmental components indicated.

(3) Where a parameter appears in the “optional determination” column in Annexes III to VII of these regulations, the competent authority shall, if it considers it necessary, have the sampling and analysis of samples carried out for the environmental components indicated.

17. (1) The competent authority shall carry out surveillance and monitoring of the environments affected and of a neighbouring zone deemed to be unaffected, special account being taken of local environmental factors and the manner of disposal, whether intermittent or continuous.

(2) Except where otherwise specified in Annexes III to VII of these regulations, the competent authority shall determine on a case-by-case basis the exact sites from which samples are to be taken, the distance of these sites from the nearest pollutant disposal point and the depth or height at which the samples shall be taken. The samples shall be taken at the same location and depth and under the same conditions in the course of successive sampling operations.

(3) The competent authority shall determine the frequency of sampling and analysis for each parameter listed in Annexes III to VII of these regulations. For parameters where determination is mandatory, the frequency of sampling and analysis shall not be less than the minimum frequencies indicated in Annexes III to VII of these regulations:

Provided that if the competent authority considers it necessary, it may

distinguish between different parameters, applying this sub-regulation to those parameters where no significant deterioration in the quality of the environment has been recorded.

18. (1) The reference methods of measurement for determining the parametric values, are specified in Annexes III to VII of these regulations. The competent authority shall ensure that laboratories using other methods can provide comparable results.

(2) The competent authority shall ensure that the containers used to carry the samples, the agents or methods used to preserve a part sample with a view to analysis of one or more parameters, the transport and storage of samples and their preparation for analysis shall be such that they do not significantly affect the analytical results.

19. For the surveillance and monitoring of the environments affected, the competent authority may, at any time, lay down other parameters in addition to those laid down by these regulations.

20. (1) The competent authority shall at regular intervals draft a report which shall contain details of the surveillance and monitoring operations carried out by the bodies appointed in accordance with sub-regulation (2) of regulation 9 of these regulations. These details shall, in respect of each environment affected, include the following information:

(a) a description of the sampling point, including its permanent features, which may be coded, and other administrative and geographical information. This information shall be provided only once when the sampling point is designated;

(b) a description of the sampling methods used;

(c) the results of the measurements of the parameters whose determination is mandatory and, where the competent authority considers it useful, also of those parameters whose determination is optional;

(d) the methods of measurement and analysis used and, where appropriate, their limit of detection, accuracy and precision;

(e) changes, adopted in accordance with sub-regulation (3) of regulation 17 of these regulations, in the frequency of sampling and analysis.

(2) The first report set of data to be communicated pursuant to sub-regulation (1) of this regulation shall be that gathered during the third year following the entry into force of these regulations.

21. The provisions of regulations 14 to 21 of these regulations shall not apply in the event of flooding or natural disaster or on account of exceptional weather conditions.

22. Where waste elimination requires that, in accordance with sub-regulation (1) of regulation 6 of these regulations, the competent authorities of more than one State should issue prior authorizations, the competent authority shall consult other States involved on the content and the implementation of the monitoring programme.

23. For the purposes of regulations 23 and 24 of these regulations:

(a) where the sulphate process is used -

(i) the expression "solid waste" shall mean:

(a) insoluble ore residues not broken down by sulphuric acid during the manufacturing process,

(b) copperas, i.e. crystalline ferrous sulphate ($\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$),

(ii) the expression "strong acid waste" shall mean the mother liquors arising from the filtration phase following hydrolysis of the titanyl sulphate solution. If these mother liquors are associated with weak acid wastes which overall contain more than 0.5 % free sulphuric acid and various heavy metals, the liquors and waste taken together shall be considered strong acid waste,

(iii) the expression "treatment waste" shall mean filtration salts, sludges and liquid waste arising from the treatment (concentration or neutralization) of strong acid waste and containing various heavy metals, but not including neutralized and filtered or decanted waste containing only traces of heavy metals and which, before any dilution, has a pH value above 5.5,

(iv) the expression "weak acid waste" shall mean wash waters, cooling waters, condensates and other sludges and liquid wastes, other than those included in the above definitions, containing 0.5 % or less free sulphuric acid,

(v) the expression "neutralized waste" shall mean any liquid which has a pH value over 5.5, contains only traces of heavy metals, and is obtained directly by filtration or decantation from strong or weak acid waste after its treatment to reduce its acidity and its heavy metal content,

(vi) the expression "dust" shall mean all kinds of dust from production plants and in particular ore and pigment dust,

(vii) the expression "SOx" shall mean gaseous sulphur dioxide and trioxide released in the various stages of the manufacturing and internal waste treatment processes, including acid droplets;

(b) where the chlorine process is used -

(i) the expression “solid waste” shall mean:

(a) insoluble ore residues not broken down by the chlorine during the manufacturing process,

(b) metal chlorides and metal hydroxides (filtration substances), arising in solid form from the manufacture of titanium tetrachloride,

(c) coke residues arising from the manufacture of titanium tetrachloride,

(ii) the expression “strong acid waste” shall mean waste containing more than 0.5 % free hydrochloric acid and various heavy metals,

(iii) the expression “treatment waste” shall mean filtration salts, sludges and liquid waste arising from the treatment (concentration or neutralization) of strong acid waste and containing various heavy metals, but not including neutralized and filtered or decanted waste containing only traces of heavy metals and which, before any dilution, has a pH value over 5.5,

(iv) the expression “weak acid waste” shall mean wash waters, cooling waters, condensates and other sludges and liquid wastes, other than those included in the above definitions, containing 0.5 % or less free hydrochloric acid,

(v) the expression “neutralized waste” shall mean any liquid which has a pH value over 5.5, contains only traces of heavy metals, and is obtained directly by filtration or decantation from strong or weak acid waste after its treatment to reduce its acidity and its heavy metal content,

(vi) the expression “dust” shall mean all kinds of dust from production plants and in particular ore, pigment and coke dust,

(vii) the expression “chlorine” shall mean gaseous chlorine released in the various stages of the manufacturing process;

(c) where the sulphate process or the chlorine process is used, the expression “dumping” shall mean any deliberate disposal into inland surface waters, internal coastal waters, territorial waters or the high seas, of substances and materials by or from ships or aircraft.

24. The dumping of any solid waste, strong acid waste, treatment waste, weak acid waste, or neutralised waste, as referred to in regulation 23 of these regulations, shall be prohibited with effect from the date of entry into force of these regulations.

25. Any person shall be guilty of an offence under these regulations if :

(a) he fails to comply with any provision of these regulations or with any order lawfully given in terms of any provision of these regulations; or

(b) he contravenes any restriction, prohibition or requirement imposed by or under these regulations; or

(c) he acts in contravention of any of the provisions of these regulations; or

(d) he conspires or attempts, or aids, or abets, any other person by whatever means, including advertising, counselling or procurement to contravene the provisions of these regulations or to fail to comply with any such provisions, including any order lawfully given in terms of any of the provision of these regulations, or to contravene any restriction, prohibition or requirement imposed by or under the said regulations.

26. Any person who commits an offence against these regulations shall, on conviction, be liable:

(a) on a first conviction to a fine (*multa*) of not less than five hundred liri but not exceeding one thousand liri;

(b) on a second or subsequent convictions, to a fine (*multa*) of not less than one thousand liri, but not exceeding two thousand liri or to imprisonment for a term not exceeding two years, or to both such fine and imprisonment:

Provided that whenever any person is found guilty of committing an offence under these regulations by means of a vehicle, the owner of the said vehicle, where applicable, is held liable in the same manner and degree;

Provided further that the court shall order any person who has been found guilty of committing an offence against these regulations to pay for the expenses incurred by the public entities and/or other persons acting on their behalf involved in the implementation of these regulations and restitution of the environment as a result of the said offence, the revocation of the permit issued by the Police and the confiscation of the *corpus delicti*.

27. (1) The provisions of article 23 and subarticle (1) of article 30 of the Criminal Code shall, *mutatis mutandis*, apply to proceedings, in respect of offences against these regulations, so however that the disqualification from holding or obtain a licence, permit or authority shall in no case be for less than one year.

(2) Notwithstanding the provisions of article 370 of the Criminal Code, proceedings for an offence against these regulations shall be taken before the Court of Magistrates (Malta) or the Court of Magistrates (Gozo), as the case may be, and shall be in accordance with the provisions of the Criminal Code regulating the procedure before

the said courts as courts of criminal judicature.

(3) Notwithstanding the provisions of the Criminal Code, the Attorney General shall always have a right of appeal to the Court of Criminal Appeal from any judgement given by the Court of Magistrates (Malta) or the Court of Magistrates (Gozo) in respect of proceedings for any offence against these regulations.

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