

G.S.R.820(E)- ENVIRONMENT (PROTECTION) FOURTH AMENDMENT RULES, 2012.

'ÆM0-33004/99 REGD. NO. D, L.-33004/99 Che Gazette of India 5781 No. 5781 EXTRAORDINARY (i) PART II—section 3—Sub-section (i) PUBLISHED BY AUTHORITY 9, 18, 1934 NEW DELHI, FRIDAY, NOVEMBER 9, 2012/KARTIKA 18, 1934, 9, 20 2 (EPT) 1986 (1986 29) 6 25 1986 -S-@ 1. (1) 20122 1 I 38, q, (ii) : (1) 4279 (2) (3) (SOQ) (NOx) (PM) (CO) #rqr (4) 1700 350 450 10 100 200 50 850 250 350 50 100 150 3% (3) (PA) (MA) 3-v:« (PTA) 3il { (DMT) 1%--q -qi-qi 30,000 ell-a-u 30 -a 2 (2) (3) THE GAZETTE OF INDIA EXTRAORDINARY (4) car caiz 3--NfiÄ-g fü&iæ, cate (tl@13-ff\$) caiz cate 2143-1%, 31*- Qi-e caiz (fir), HT, caiz (âr1fr7), car , (HCN) (UAPs), (HAPs), dT3fi#r fir IO 30 75 05 01 10 0.1 5.0 20.0 m.4T./ 20 100 m.ur./ 10 30 75 05 0] 0.1 5.0 25 HAP- 312..@T 3-ru ai*R 3-- 52@T 3 (2) (3) (4) (5) 75 500 a-rcq 10 76 500 10 76 75 76 (R, (T) (T) (iv) 4 & .#T. Otr 200 I 95% 90% API RP 575 q-g•a1Fr 4 (2) (3) iö.æi. "9 THE GAZETTE OF INDIA : EXTRAORDINARY [PART IP- SEC. dTâ (VOC) 99.9% äNäT \$1 F2trztT 99% arâ â7T7 fau (i) VOC 312.4@T (i) VOC (ii) (i) VOC (i) 299.5 (ii) (i) 299.99 vi, - 2--TTJT - III. - VOC-HAPs VOC,,HAPs VOC,,HAPs toft) (ftv.) Göliz Laiz ceric (71T_/EIQ) 100 0.5 25.0 50.0 5 [TET. 844(3R), 19 1986 (31) altru 1987; 3T3-tr 512 (31), 2009; GT.Eöt.fä 543 (30. 22 2009; 595 (31) 2i 2009; 794 (3) aTtTQ 4 2009; 8rÄ.? 826 2009; 01 I 2010; 61 2010, 485 2010; 608 (H) 21 2010; 739 9 2010; 809 (30 2010; 215 (H) 15 20M; 221 (31) 18 2011; 354 (30 2 2011; 8r.EFT.fi 424 (31) aflul 2011; 446 (31) 2011; 152 (3) 16 2012; 266 (3) 2012 277 (31) MINISTRY OF ENVIRONMENT AND FORESTS NOTIFICATION New Delhi, the 9th November, 2012 GS.R. exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:- (1) These rules may be called the Environment (Protection) Fourth Amendment Rules, 2012. (2) They shall come into force on the date of their publication in the Official Gazette. In the Environment (Protection) Rules, 1986,- (a) in Schedule I, in the entries against serial number 38 relating to 'Petrochemical (Basic and Intermediates), (i) in the entries under column 2, for the word "EFFLUENT", the letter and word "A. Effluent" shall be substituted; (ii) at the end, the following entries shall be insened, namely:- 1. 2. S. No. (1) Indust (2) "(Furnace, Boiler, Heater, Vaporiser) GJ/?z-2 Parameter (3) Sulphur Dioxide (SO2) Oxides of Nitrogen (NOx) Particulate Matter Standards (4) B. Emission from Chimney / Stack Limitin concentration in m m , unless stated Fuel Type Existing Gas Liquid Gas Liquid Gas Liquid Plants 50 1700 350 10 100 New plants / Expansion of Existin Plant 50 850 250 350 05 50 6 (1) THE GAZETTE OF mDIA : EXTRAORDINARY Sec. 3(i)] 2 3 Carbon Monoxide (00) Gas Liquid 4 150 200 100 150 Note,- (i) (iii) All values shall be corrected to 3% Oxygen. Wet scrubber shall necessarily be operated at the time of decoking. Norms for CO shall be monitored only in case of Phthalic Anhydride (PA), Maleic Anhydride (MA), Terephthalic Acid (PTA) and Dimethyl Terephalate (DMT) Plants. Norms for CO emissions shall not be applicable to PA/ MA manufacturing standalone existing plants with an installed capacity of less than 30,000 metric tonnes per annum, provided that such units have a chimne 'stack of minimum 30 metres hei t for emittin Carbon Monoxide. Process Emission S ecific Pollutant Source EDC/VCM Plant and Incinerator EDC / VCM Plant and Incinerator Wastewater stripper, acrylonitrile plant, ca rolactum lant Naphtha pre-treatment lant, olefin lant (TDD and MOI) lant A lonitrile lant TDI, Methylenediphenyl Di-iso te MDI) Plants Benzene, Butadiene Plants EO, VCM, EDC, ACN, PO Plants PA, MA and TDI Plants Limiting concentration in 3 Chlори ne Hydroch loric Acid Mist Ammonia Hydrogen Sulphide Phos ene H dro C anide(HCN) VOC (HAPs)- TDI and MDI VOC (HAPs), Benzene and Butadiene VOC (FIAPs), EO, VCM, EDC, ACN and PO Or anic Particulate Exiting Plants IO 30 75 05 01 IO 0.1 5.0 20.0 50 New Plants 30 75 05 01 10 0.1 5.0 10.0 25 Process Emission General Pollutant VOC (MA, PA and Phenol) VOC (EB, Styrene, Toluene, Xylene, Aromatics, EG and PG VOC (paramn, Acetone and Olefins) Source MA, PA, Phenol Plants Ethyl benzene (EB), Styrene, Toluene, Xylene, Aromatics, EG, PG Plants Non-methane, HC (paraffin), Acetone', Olefins Plants Limitin concentration in 20 100 150 NOTL— HAP— Hamrdous Air Pollutants are those pollutants that cause cancer or other serious health effects, or adverse environmental and ecological effects. C. Standards for Fugitive Emission Storage of Volatile Liquids.' General Petrochemical / Petroleum Products. Storage tanks with capacity between 4 to 75m3 and tota] vapour pressure (TV P) of more (1) than IO kpa should have fixed roof with pressure valve vent. (2) (3) (4) (5) (ii) (iii) Storage tanks

with capacity between 75 to 500 m³ and total vapour pressure (TV P) Of IO to 76 kpa should have internal floating roof or external floating roof or fixed roof with vapour control or vapour balancing system. Storage tanks with the capacity of more than 500 m³ and total vapour pressure (TVP) of 10 to 76 kpa should have internal floating roof or external floating roof or fixed roof with vapour control system. The tanks with the capacity of more than 75 m³ and total vapour pressure (TV P) of more than 76 kpa should have fixed roof with vapour control system. Requirement for seals in Floating Roof Tanks- (a) Internal Floating Roof Tank (IFRT) and External Floating Roof Tank (EFRT) shall be provided double seals with minimum vapour recovery of 96%. (b) Primary seal shall be liquid or shoe mounted for EFRT and vapour mounted for IFRT. Maximum seal gap width will be 4 cm and maximum gap area will be 200 cm²/m of tank diameter. (c) Secondary seal shall be rim mounted. Maximum seal gap width will be 1.3 cm and maximum gap area will be 20 cm² 1m of tank diameter. (d) Material of seat and construction shall ensure high performance and durability. (ii) Fixed roof tanks shall have vapour control efficiency of 95% and vapour balancing efficiency of 90%. (iii) (a) inspection and maintenance of storage tanks shall be carried out under strict control; (b) for the inspection, API RP 575 may be adopted; (c) In-service inspection with regard seal gap should be carried out once in every six months and repair to be implemented in short time; and (d) the possibility of on-stream repair of both shall be examined. (iv) Storage tanks shall be painted with white colour shade, except for derogation of visually sensitive area. D. Storage of Benzene, VCM and ACN FRT with vapour for incineration with 99.9% of removal efficiency for volatile organic compounds (VOC) shall be provided; or IFRT/EFRT with double seals, emission-reducing roof fitting and fitted with fixed roof with vapour removal efficiency of at least 99% shall be provided; or Internal floating roof and nitrogen blanketing in between fixed and floating roofs shall be provided. U274 G / 2 —3 PART 8 THE GAZETTE OF INDIA : EXTRAORDINARY (Emission control for Road tank, u-uck / Rail tank, wa on loadin Loading of Volatile Products Naphtha: (i) VOC reduction, % or (ii) Emission, Benzene and Butadiene: (i) VOC reduction, % or (ii) Emission, mg/m Toluene/Xylene: (i) VOC reduction, % or (ii) Emission, m m (i) or ii) <5 (i) 299.99 or (ii) S 20 (i) 299.98 ii <150.". (b) s. No. "9 in Schedule VI, in Part D relating to General Standards, in the entries under item III relating to Load/Mass based Standards, after serial number 8 relating to 'Glass Industry' and entries relating thereto, the following serial number and entries shall be inserted, namely :- Industry Petrochemicals (Ba.sic and Intermediates) Parameter Organic Particulate VOC-HAPs (TDI + MDI) VOC-HAPs (Benzene + Butadiene) VOC-HAPs (EO, VCM, PO Standard Source Phthalic anhydride (PA), Maleic anhydride (MA), Toluene Di-isocyanate (TDI) I ants — rocess emission (Toluene Di-isocyate) IDI, Methylenediphenyl isocyanate (MDI) Plants- Process emission Benzene, Butadiene Plants Process emission EO, VCM, EDC, ACN, PO Plants — Process emission Quantum limit in gm/hour for New/ Expansion Plants m/hr 100 0.5 25.0 50.0 Abbreviations: EG — Ethylene Glycol, PG — Propylene Glycol, EO — Ethylene Oxide, VCM — Vinyl Chloride Monomer, EDC - Ethylene Di Chloride, ACN - Acrylonitrile, PO - Propylene Oxide, HCN - Hydrogen Cyanide.". AJAY A-YAGI, Jt. secy 9 Note.— The principal rules were published in the Gazette of India vide number S.O. 844 (E), 191b November, 1986 and subsequently amended vide notifications numbers S.O. 433 (E), dated 18th April 1987; G.S.R. 97 (E), dated the 18'h February, 2009; G.S.R. 149 (E), dated the 4th March , 2009; G.S.R. 512 (E), dated the 9'h July, 2009; G.S.R. 543 (E), dated the 22nd July, 2009; G.S.R. 595 (E), dated the 21st August, 2009; G.S.R. 794 (E), dated the 4th November, 2009; G.S.R. 826 dated the 16th November, 2009; G.S.R. 01 (E), dated the January, 2010; G.s.R, 61 (E), dated the February, 2010; G.S.R. 485 (E), dated the 9th June, 2010; G.S.R. 608 (E) ,dated the 21st July, 2010; G.S.R. 739 (E), dated the 9th September, 2010; G.S.R. 809(E), dated, the 4th October, 2010, G.S.R. 215 (E), dated the 15th March, 2011; G.S.R. 221(E), dated the March, 201 1; G.S.R. 354 dated the 2nd May, 2011; G.S.R. 424 (E), dated the June, 2011; G.S.R. 446 (E), dated the 13th June, 2011; G.S.R. 152 (E), dated the 16th March, 2012; G.S.R. 266(E), dated the 30th March, 2012; and G.S.R. 277 (E), dated the March, 2012. Printed by the Manager, Government of India Press, king Road, Mayapuri, New Delhi-1 and Published by the Controller of Publicallons, Delhi-1 10054