

11.5 TECHNICAL STANDARDS AND SPECIFICATIONS INCLUDING SAFETY STANDARDS FOR CITY OR LOCAL NATURAL GAS DISTRIBUTION NETWORK

REGI). NO D. L ...33004 99 Che Gazette of •tidia No. 4261 EXTRAORDINARY PART III—section 4 PUBLISHED BY AUTHORITY 24, 2016/3FAVT4UT 3, 1938 DELHI, THURSDAY, NOVEMBER 24, 2016/AGRAHAYA.NA 3, 1938 24 2016 üé 2006 (2006 1 9) 61 --âTé Farr tfönu-t), 2008 it a-pa-m_ (1) fifi-a-fiT I-a-ft-u-rcr-#i -a-ré f-ä-rr a-*---h-fi fifi-frat) 2016 2 fä--,,-IJT fra-rr fifi-f>qi) 2008 (i) (ii) } , 6 , / 9573 l' 9573 11 ... " 9fiz " , fraiT. • -Ëi Ff9_n- -a-É 3439 (i! 2016 THE GAZETTE OF INDIA : EXTRAORDINARY [PARI- III—SEC 4] (iii) (iv) (v) (vi) (vii) (viii) (ix) (x) (xi) (xii) (xiii) -f*-fir-FT I T, -a;-q;- 9fi-rfi--; 38---d--q-t;t "q-ü / -E-q-4il-?fiT cfi-a--v- -9-t-#t ; Qi-a-a 'v 14885 4437 8085 3 " 9TZä fr,AT Ft-g.FT. "S-TÉTTZT 14885 3Tré-0ÄTür4437 qq-z-qT 3Tr-i-qr-4-h 4437 3 a-r é-pa 1555 3 ÉfiTT1 " | , Q-a-q-t?i u-rg--q -fi -a-fi zn-u-q-r; 8085 3 3 AT 1555 3 TFFh-fr---q- zq-q-r-a-r iv) V) 2+1 9T-ä•t -Rt ZTÜTRT" q-q-n-\$t ft---q-rz-q- -fi 1 Tfi--t 8085 3 Q-r-*T a;---a-r 4437 3 AT 1555 3 -h--s efi-rfr VT7üFT" it "1FF7 60 +1-1-1" 9T--a--ä 3ft\$R Iq " 1 "—3-4 t-a—n-rr ft--;ä-fi-ff -a (xiv) (xv) (xvi) (xvii) I q "il-;q =q- p-va-v" -z-qüq-za 777-t-r-r —sn-ä- Ä-E-T 375 q-a fr--q-t>-fü-fl -fir -q;-€-fr 100 TE 150 \$r. I 375 ZTIZZ -g-qr-ä / q-rä -e. "fr--FT4 31 .8, 3Tq-æn-u-T " 91-*T v-fi---Z4Tfii--ft : 31 .8 I i z-q 33-a-#-FT --\$-r 31.8 91--*t 3 1.8 I -a-r-fr "q-T7Ä" 5352..... " "...i-ä 15761 100 (xviii) 1 'tfr.-\$r.-h. "ÄT@" " . . 91-*i R---q-fr-ün 5351 17292 , -z-ä-T-rh- (xix) -em-ox 1 a-t-ä a-r-\$r it-€[" "frfrqm" 1239 FT 2) fir 44131-1 "3TÉITq 1239 3*T? 2: q-rvq " , 4 (XX) (xxi) (xxii) (xxiii) (xxiv) (xxv) (xxvi) THE GAZETTE OF INDIA EXTRAORDINARY [PART III—SEC. 41 1 -Ä 9fi-r-fi-; 24-7 *-7-a-f-ff -z-TT_9fiTfr-; , "T.n-fr-a-*;- 10204-34fhf+FT 4177" 10204. --41--âi "3Té-rrq- 319 _ VI--*-T --h-g-r _ 12164: éT5 12165: 2 # , -e-ä-q-r- ;--d tr--ä Efi "fr-z-f#-r / 311731 iii---a-a 91-*T El-rrrq-r _ 137-1 2: -a-q-#70JT" "tr-p•r 1359 / 4161 afi-z-(" 91--*t -Gt "tl-v-q- 1359 - " ; 2 -ä pt;fi) F-a-r fä-p—r 2 et, g-*--q-r-ff z-q,fi-ra_ 55014 : R-q-•a• -q , å-q-ff 61000-6-1 : (ég-q\$R) < 1611 tüÄ-60335-l: å-q-ff IV frT(„-a-i-ä 9T-*r na-i-ä ft-rr 1254 1 2 34enxaafrl", 5 (xxvii) IV -q-fä-q 3Td-å-ff F*T" "FT? 29453: 1994 9453: q---c-a-fi-q- -gi-q-a-a-r (é-v-q---#i-): fi--ä-fr—ä ; .1316/2016] •q-rxr.@. 612(3T), 27 &FTFT, 2008 FTÄT.fi.750(3-T), 14.10 2009, tr4TET/ ?frfrÉr/1/2010 16.12.2014, A7-@q/V1/1/2007, 01.012015 (SAT?) / [1 12010 09.04.2016 PETROLEUM AND NATURAL GAS REGULATORY BOARD NOTIFICATION New Delhi, the 24th November, 2016 F. No. M(I)/T4S/CGD/1/2010.—In exercise of the powers conferred by section 61 of the Petroleum and Natural Gas Regulatory Board Act, 2006 (19 of 2006), the Petroleum and Natural Gas Regulatory Board hereby Illakes the following regulations to amend the Petroleum and Natural Gas Regulatory Board (Technical Standards and Specifications including Safety Standards for City or Local Natural Gas Distribution Networks) Regulations, 2008, namely:- 1

2. Short title and commencement.(1) These regulations may be called the Petroleum and Natural Gas Regulatory Board (Technical Standards and Specifications including Safety Standards for City or Local Natural Gas Distribution Networks) Amendment Regulations, 2016, (2) They shall come into force on the date of their publication in the Official Gazette. In the Petroleum and Natural Gas Regulatory Board (Technical Standards and Specifications including Safety Standards for City or Local Natural Gas Distribution Networks) Regulations. 2008, - (ii) (iii) in Appendix I. serial number 6, under the heading "Critical infrastructure/ activity/ processes", for "Steel reinforced rubber hose conforming to IS 9573 Type IV.", the following shall be substituted, namely: "Steel reinforced rubber hose conforming to IS 9573 Type 11."; in Appendix I, serial number 9_ under the heading "Critical infrastructure/ activity/ processes", for the words beginning with "Emergency Response Plan, Disaster Management Plan and written emergency procedures,- . material safety data sheets etc. at its disposal. ", the following shall be substituted, namely:- and ending with 'Emergency Response Plan, Disaster Management Plan and written emergency procedures. Also, provide for an Emergency Control Room, manned round the clock and equipped with effective communication system and emergency vehicles equipped or provided with communication facilities, first aid equipmenl, fire extinguishrrq gas detectors, repair kits and tools, maps, plans, material safety data sheets etc. at its disposal. ", in Schedule IA, under the heading "Pipes and tubing for above ground service lines up to meter set assembly' after the words beginning with "The use of copper tubing shall only be after consumer meter such that. and ...-this is not accessible to third party." , the following shall be added, namely: ending wilh "Use of copper pipe / tube before consumer meter should be inside the

kitchen only"; in Schedule IA, under the heading "Plastic Pipe and Components", for the words beginning with "Polyethylene and PE fittings conforming to ISO (PE) pipes conforming to IS 14885 or ISO 4437, and ending with 8085 Part 3 shall be acceptable.", the following shall be substituted, namely: 'Polyethylene (PE) pipes conforming to IS 14885 or ISO 4437 and PE fittings conforming to [ISO 4437 Part 3 or EN 1555 Part 3 shall be acceptable.'; 6 (v) (vi) (vii) (viii) (ix) (30) (Xij) (xiii) (xiv) GAZETTE OF INDIA EXTRAORDINARY [PART III—SEC- 4] in Schedule IA. the heading 'Reuse of Ductile Iron Pipes'. and the words under it beginning with "Reuse of ductile and ending with pipes is not permitted" shall be omitted: in Schedule IC, under the heading "Fittings other than Valves and Flanges", for the words "Thermoplastic fittings conforming to ISO 8085 Part 3 shall be acceptable and shall meet following requirements:" the following shall be substituted, namely:- 'Thermoplastic fittings conforming to ISO 4437 Part 3 or EN 1555 Part 3 shall be acceptable and shall meet following requirements:' in Schedule I C. under the heading "Fittings Other than Valves and Flanges", in sub-paragraph b, , the -words "Heating element shall not be exposed and all coils are embedded into the body of the fittings." shall be omitted: in Schedule I D, under the heading "CGD network Description", in the serial numbers iv) and v). the words beginning with "(stream redundancy shall and ending with, . not be less than 2+1) " shall be omitted; in Schedule I D, under the sub-heading "Plastic Pipe and Tubing Design Formula", for the words beginning with "Nominal wall thickness of plastic pipe. and ending with .shall be calculated as per following formula.' the following shall be substituted, namely:- "The design pressure for plastic gas piping systems or the nominal wall thickness for a given design pressure shall be determined by the following formulae" in Schedule I D, under the heading "Design Pressure of Plastic Fitting". for the words beginning with "All PE fittings shall. and ending with ".. conforming to ISO 8085 —Part the following shall be substituted, namely: "All PE fittings shall conform to ISO 4437 Part 3 or EN 1555 Part 3. in Schedule 11), under the heading "Plastic Pipe and Tubing Joints and Connections", under the sub-heading "General Provisions". the words beginning with "Fusion fittings shall have inbuilt. and ending with . beyond external clamp system." shall be omitted; in Schedule I D, In the sub-heading beginning with "Control and Limiting Of Gas Pressure in High Pressure Steel... " and ending with Ductile iron, Cast Iron or Plastic Distribution system. ", the following shall be substituted, namely:- "Control and Limiting of Gas Pressure in High Pressure Steel or PE Distribution System." , in Schedule I D, under the sub-heading, "Control and Limiting of Gas Pressure in low Pressure Distribution Systems", the words beginning with "Control and limiting of pressure of gas delivered to domestic, small commercial, and ending with .and small industrial consumers from high — pressure distribution system. ' shall be omitted in Schedule I D, under the heading "GAS SERVICE LINES", for the sub-heading, "Installation or Service Lines"! at the end of the paragraph beginning with "All plastic pipe and fittings.. and ending with. -shall be provided in confined space. 's, the following shall be added, namely. "The depth of cover can be further reduced upto 375 mm provided it meets the following requirements: li. v. Vli. VIII. The line pressure shall not exceed 110 mbar. The diameter of pipe shall not exceed 63mm. Pipe shall be laid in a trench with Reinforced Cement Concrete (RCC) slab at the top and bottom. The RCC slab of the roof of basement shall be treated as the bottom. There shall be a sand filling across three sides of the line pipe of 100 mm each. RCC on top shall have minimum thickness of The top side shall be covered by warning mat. The Quantitative Risk Assessment (QRA) of the site shall be carried out and specific approval from management shall be taken for reducing the depth of cover upto 375mm. The site shall be private property i.e. multi-storey buildings apartments with no movement Of heavy vehicles.' . III-og 4) 7 (xvi) (xvii) (xviii) (xix) (XX) (xxij) (xxii) (xxiii) (xxiv) iii Schedule I E, for the sub-heading "Leakage Surveys" for the words beginning with "Any one or combination of methods. and ending with . _ described in ASME B 31.8. Appendix M can be adopted based on their effectiveness for the specific areas " , the following shall be substituted, namely: "Any one or combination of methods described in ASME B3 1.8 can be adopted based on their effectiveness for the specific areas. in Schedule I E, for the sub-heading "Repair of Plastic Pipe or Tubing", for the words beginning with 'Only repair method allowed is use of full encirclement.. and ending with split sleeves which shall be in accordance with ASME B 31.8.", the following shall be substituted, namely:- - Repair Of Plastic Pipe or Tubing shall be in accordance with ASME B3 1.8. in Annexure I, under the heading "List of Specifications of Piping Materials used in CGD Network", in the sub heading 'Valves', for the words beginning with 'BS 5352. and ending with .petrochemical and allied industries", the following shall be substituted, namely: •BS EN ISO 15761: Steel gate, globe and check valves for sizes DN 100 and smaller, for the petroleum and natural gas

industries." , in Annexure I. under the heading "List of Specifications of Piping Materials used in CGD Network", in the sub heading "Valves", for the words beginning with "BS 5351...." and ending with "...Small Floating ball valve", the following shall be substituted, namely:- 'BS EN ISO 17292: Metal ball valves for the petroleum petrochemical and allied industries.' , in Annexure I. under the heading "List of Specifications of Piping Materials used in CGD Network", under the sub-heading "Fittings", for the words beginning with "IS 1239 (PART-2). and ending with vand _other wrought steel pipe fittings" the föllowing shall be substituted, namely:- "IS 1239 (Part-2): Steel Tubes, Tubular and Other Steel Fittings-Specification-part 2: Steel pipe fittings.' in Annexure I, under the heading \$ -List of Specifications of Piping Materials used in CGD Network", under the sub-heading "Plastic Vaives-•, for lhe words beginning wilh "EN 10204...." and ending with "...Excess flow check valve", the following shall be substituted. namely: ' 'EN 10204: Metallic products- Types of Inspection documentS" in Annexure I, under the heading "List of Specifications of Piping Materials used in CGD Network", for the sub- heading "Brass Fittings", after the words "IS 319 Free Cutting Leaded Brass Bars, Rods and Sections Specification", the following shall be added, namely:- "EN 121 64: Copper and copper alloys. Rod for free machining purposes. EN 12165: Copper and copper alloys. Wrought and unwrought forging stock.' in Annexure 11, under the heading "List of Specifications for Equipment used in CGD Network", under the sub- heading ' 'Metering Equipment". for the words beginning with • 'OIML R6 / OIML R3 1 and ending with . Diaphragm gas meters", the following shall be substituted. namely:- "OIML R 137-1&2: Gas meters." in Annexure 11, under the heading "List of Specifications for Equipment used in CGD Network", under the sub- heading "Metering Equipment", the words beginning with "BS 1359 BS 4161 and ending with . .Diaphragm gas meters", the following shall be substituted. namely:- "BS 1359 : Gas meters - Diaphragm gas meters."- in Annexure 11, under the heading "List of Specifications for Equipment used in CGD Network", under the sub- heading "Metering Equipment", the words beginning with 'SOIML R 32.. and ending with "... Rotary piston gas meters and turbine gas meters" shall be omitted; 8 (xxvi) (xxvii) THE GAZETTE OF INDIA : EXI RAORL)INARNI [PART III—SEC 4] in Annexure 11, under the heading "List of Specifications for Equipntent used in CGD Network", for (he sub- heading "Electro fusion machine for jointing PE pipe and fittings". the following shall be substituted. namely:- '*ISO 12 176-2: Plastic pipes and fittings- Equipment fol fusion _jointing polyethylene systems- Part 2: Electrofusion. EMC Standards EN-55014: EN 61000-6-3: EN 61000-6-1: EN-61 000-3-2: EN-60335- 1: EN-60335-2-45: Limits and methods of measurement of radio disturbance characteristics of electrical motor operated and thermal appliances for household and similar purposes, electric tools and similar electric apparatus Electromagnetic compatibility (EMC): Generic standards- Emission standard for residential, commercial and light-industrial environments Electromagnetic compatibility (EMC): Generic standards- Immunity for residential. commercial and light-industrial environments Electromagnetic compatibility (EMC): Limits- Limits for harmonic current emissions (equipment input current < 16 A per phase) Household and similar electrical appliances: Safety- General requirements Household and similar electrical appliances: Safety Particular requirements for ponable heating tools and similar appliances- in Annexure I V, under the heading, "Minimum Requirements for GI Pipes and Copper Tubing used in service lines up to consumer appliance", under the sub-heading "Copper Tubing", the words beginning with "Fittings for use in joining copper tube shall be. G" and ending with " per BS EN 1254 Parts I and 2." shall be omitted. in Annexure [V, under the heading, "Minimum Requirements for GI Pipes and Copper Tubing used in service lines consumev appliance", for (he sub-hea&ng "Copper Tubing", for [he words beginning with "Filler metals shall be.. and ending With ,.as per BS EN 29453.1994 - Soft solders alloys - Chemical compositions and forms. '7, the following shall be substituted, namely:- "Filler metals shall be as per BS EN ISO 9453: Electromagnetic compatibility (EMC). Generic Standards. Immunity for residential, commercial and light industrial environments.' Foot Note . VANDANA SHARMA, secy [ADVT-1W4Æxty./316/2016] Principal regulations were notified vide No. G.S.R. 612(E). dated 27th August, 2008. Amended vide G.S.R. 750(E) dated 14-10-2009. F. No. 1/2010 dated 16-122014. F. No. I-MISCNIW2007 dated 01.01.2015 and F. No. dated 09.0442016 Uploaded by Dte. of Printing at Government of India Press, Ring Road. 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