



Code for Facilities, Technology and Inspection for Governors of General Urban Gas Business

Deliberation/Resolution by Gas Technical Standards Committee : March 15, 2019

Approval by the Ministry of Trade, Industry & Energy : April 5, 2019

Personnel

Gas Technical Standards Committee

Chairman	Kwang-Won Lee, Professor of Hoseo University
Vice-Chairman	Seung-Hoon Nam, Principal Researcher of KRISS
Ex Officio Member	Hui-Won Lee, Manager of Energy Safety Department, Ministry of Trade, Industry & Energy Hae-Myeong Yang, Director of Technology and Safety, Korea Gas Safety Corporation
High-Pressure Gas	Seung-Hoon Nam, Principal Researcher of KRISS Beom-Seok Lee, Principal Professor of Kyung Hee University Dong-Myeong Ha, Professor of Semyung University Chang-Gi Kim, Principal Researcher of Korea Institute of Machinery and Materials Hyuk-Myun Kwon, Director General of Occupational Safety & Health Research Institute Su-Dong Byun, CEO of Q-Best
Liquefied Petroleum Gas	Doo-Seon Park, Managing Director of Daesung Industrial Gas Co., Ltd Hyeong-Hwan Ann, Professor of Korea National University of Transportation Byeong-Hak Choei, Professor of Gangneung-Wonju National University Seong-Min Lee, Director of KOGAS Research Institute Yong-Gwon Lee, Vice-President of EG CNE Co.,Ltd Gi-hyeon Jang, Director of Kiturmi Jeong-Sik Chon, Direto of E1 CO., Ltd.

History of Establishment and Revision of KGS Code	
Code Number	KGS FS552 ²⁰¹⁹
Code Title	Code for Facilities, Technology and Inspection for Governors of General Urban Gas Business

Date of Establishment/Revision	Description
December 31, 2008	Established (Notification of the Ministry of Knowledge Economy No. 2008-381)
May 15, 2009	Revised (Notification of the Ministry of Knowledge Economy No. 2009-193)
September 25, 2009	Revised (Notification of the Ministry of Knowledge Economy No. 2009-357)
December 2, 2009	Revised (Notification of the Ministry of Knowledge Economy No. 2009-454)
November 3, 2010	Revised (Notification of the Ministry of Knowledge Economy No. 2010-421)
January 3, 2011	Revised (Notification of the Ministry of Knowledge Economy No. 2010-489)
January 5, 2012	Revised (Notification of the Ministry of Knowledge Economy No. 2011-635)
December 28, 2012	Revised (Notification of the Ministry of Knowledge Economy No. 2012-549)
June 27, 2013	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2013-136)
January 7, 2015	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2015-001)
July 3, 2015	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2015-372)
August 7, 2015	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2015-436)
October 2, 2015	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2015-518)
August 10, 2018	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2018-419)
October 16, 2018	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2018-512)
November 12, 2018	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2018-567)
April 5, 2019	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2019-218)

Table of Contents

1. General.....	1
1.1 Scope.....	1
1.2 Validity of Code	1
1.3 Definitions	1
1.4 Application of Other Codes (currently not used).....	3
1.5 Interim Measures.....	3
1.5.1 Interim measure for discharge port size of governor safety valve	3
1.5.2 Interim measure for foundations, walls and exposed piping of governor rooms.....	3
1.5.3 Interim measures for preparation of piping drawings	3
1.6 Restriction to Use of Appliances.....	3
1.7 Restriction to Piping Pressure (not applicable).....	4
1.8 Restriction to Installation of Piping (not applicable).....	4
1.9 Restriction to Installation of Polyethylene piping for gases (not applicable).....	4
1.10 Exemption of Standards of Licensing Authorities	4
1.11 Installation Standard of Buried Type Governors.....	4
2. Installation Standard.....	4
2.1 Layout Standard.....	4
2.1.1 Locations of governors.....	4
2.2 Foundation Standard (currently not used).....	6
2.3 Storage Facility Standard (not applicable).....	6
2.4 Gas Facility Standard (currently not used)	6
2.5 Piping Facility Standard.....	6
2.6 Governor (Room) Standard	7
2.6.1 Materials of governor rooms.....	7
2.6.2 Construction of governor room.....	7
2.6.3 Thickness and strength of governor room	7
2.6.4 Installation of governors.....	8
2.6.5 Performance of governor	8
2.7 Accident Prevention Facility Standard.....	8
2.7.1 Installation of overpressure safety devices	8
2.7.2 Installation of gas leak alarm system.....	9
2.7.3 Installation of explosion-proof electrical facilities	11
2.7.4 Installation of ventilation systems.....	11
2.7.5 Installation of hazard monitoring and control system.....	14

2.7.6	Installation of corrosion protection systems (currently not used)	15
2.7.7	Measures to prevent damage to piping due to excavation works (not applicable)	15
2.7.8	Installation of static eliminators (currently not used)	15
2.7.9	Installation of toppling prevention devices (currently not used)	15
2.7.10	Installation of moisture and impurity remover	15
2.7.11	Measures for prevention of freezing	15
2.8	Damage Control Facility Standard	15
2.8.1	Installation of dikes (not applicable)	15
2.8.2	Installation of protection walls (not applicable)	15
2.8.3	Installation of sprinkler systems (not applicable)	15
2.8.4	Installation of detoxification facilities (not applicable)	15
2.8.5	Installation of neutralization and transfer facilities (currently not used)	15
2.8.6	Installation of emergency shutoff device (currently not used)	15
2.8.7	Installation of gas supply shutoff device	16
2.9	Associated Facilities Standard	16
2.9.1	Installation of measuring facilities (currently not used)	16
2.9.2	Installation of emergency power systems	16
2.9.3	Installation of pressure recorder	16
2.9.4	Installation of communication systems (currently not used)	16
2.9.5	Installation of operation facilities	16
2.10	Marking Standard	16
2.10.1	Boundary markings and warning signs	17
2.10.2	Boundary fences	17
3.	Technical Standard	18
3.1	Safety Maintenance Standard (currently not used)	18
3.1.1	Maintenance of foundations (currently not used)	18
3.1.2	Maintenance of storage facilities (not applicable)	18
3.1.3	Maintenance of gas facilities (currently not used)	18
3.1.4	Maintenance of piping facilities (currently not used)	18
3.1.5	Maintenance of accident prevention facilities	19
3.2	Transfer and Filling Standard (not applicable)	19
3.3.	Inspection Standard	19
3.3.1	Inspection of overall system	19
3.3.2	Inspection of foundations (currently not used)	19
3.3.3	Inspection of storage facilities (not applicable)	19
3.3.4	Inspection of gas facilities (currently not used)	19
3.3.5	Inspection of piping facilities (currently not used)	19
3.3.6	Overhaul of governors	19

3.3.7 Inspection of accident prevention facilities	19
4. Inspection Standard.....	20
4.1 Inspection Items	20
4.1.1 Intermediate inspection (not applicable).....	20
4.1.2 Construction supervision.....	20
4.1.3 Regular inspection.....	20
4.2 Inspection Methods.....	21
4.2.1 Intermediate inspection and safety confirmation (not applicable).....	21
4.2.2 Construction supervision and regular inspection.....	21
Appendix A. Installation Standard of Buried Type Governors	25

Code for Facilities, Technology and Inspection for Governors of Urban Gas Business

1. General

1.1 Scope

This code applies to the installation, operation and inspection of governors among gas supply facilities of general city gas business operators in conformity to the Urban Gas Business Act (hereinafter to be referred to as "the Act"), Article 2, No.4 and No. 5.

1.2 Validity of Code

1.2.1 This Code has passed the deliberation and resolution by the Gas Technical Standards Committee (Bill No. 2019-2, March 15, 2019) in conformity to the High-Pressure Gas Safety Control the Act, Article 33-2, in accordance with the Act, Article 17, Clause 4-2 has been approved by the Minister of Trade, Industry & Energy (Notification No. 2019-218 of the Ministry of Trade, Industry & Energy, April 5, 2019) and is valid and effective as detailed standards in conformity to the Act, Article 17-4, No. 2.

1.2.2 Conformity to this Code is deemed to conform to Table 6-2, No. 2 of the Enforcement Regulation in accordance with the Act(hereinafter referred to as "Enforcement Regulation"), Article 17-5, Clause 4. <Revised on August 7, 2015>

1.3 Definitions

The meanings of the terms used in this Code are as follows:

1.3.1 A "governor" means the equipment which has the pressure reduction function to reduce the pressure of city gas to be suitable for consumers, the pressure regulating function to maintain the