

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

Gas Technical Standards Committee

Byung-Hak Professor Gangneung-Wonju Choi, Chairman

National University

Vice-Chairman Gi-hyun Jang, Professor of Inha University

Yoon-Gil Hwang, Manager of Energy Safety Department, Ex Officio Member

Ministry of Trade, Industry & Energy

Chae-Sik Kwak, Director of Technology and Safety,

Korea Gas Safety Corporation

Byung-Hak Choi, Professor of Gangneung-Wonju High-Pressure Gas

National University

Seong-Jin Song, Vice president of SungKyunKwan

University

Beom-Seok Lee, Professor of KyungHee University

Chun-Seok Yoon, CEO of Hanul E&R

Yeong-Hoon Ann, Professor of HanYang University

Hyeong-Hwan Ann, Professor of Korea National Liquefied Petroleum

Gas

University of Transportation

Hyuk-Myun Kwon, Professor of YonSei University

Jeong-Sik Cheon, Director of E1 CO., Ltd.

kyung-Soo Kang, Senior Researcher of Korea Institute of

Energy Research

Yong-Kwon Lee, Vice-President of DaeYeon Co., Ltd.

Urban Gas Dong-Il Shin, Professor of MyongJi University

Jeong-Hoon Kim, Principal Researcher of Korea Institute

of Machinery and Materials

In-Cheol Jeong, Director of Yesco Co., Ltd. Gi-hyun Jang, Professor of Inha University

Hydrogen Gas Kwang-Won Lee, Professor of HoSeo University

Ho-young Jeong, Professor of ChonNam National

University

In-Yong Kang, CEO of H&Power Co., Ltd.

Woon-Bong Baek, Senior Researcher of Korea Institute

of Standards and Science

Korea Gas Safety Code

This code is the detailed standards established by the Gas Technical Standards Committee in accordance with Article 22-2 of "High-Pressure Gas Safety Control Act", Article 45 of "Safety Control and Business of Liquefied Petroleum Gas Act" and Article 17-5 of "Urban Gas Business Act", Article 48 of "Hydrogen Economy Promotion and Hydrogen Safety Management Act". Since conformity to this Code is deemed to conform to the laws and regulations above, this Code must be observed.

This English version of KGS Code is an informal translation from its Korean original version. Only the Korean version of the KGS Code is officially effective since it has been authorized by the Gas Technical Standards Committee (KGS Code Committee). The secretariat of the Committee reserves the right to revise the English version whenever translation errors are found.

History of Establishment and Revision of KGS Code		
Code Number	KGS FS552 ²⁰²²	
Code Title	Code for Facilities, Technology and Inspection for Governors of General	
	Urban Gas Business	

Date of	Description
Establishment/Revision	
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)
June 14, 2019	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2019-375)
July 16, 2019	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2019-434)
March 18, 2020	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2020-169)
September 4, 2020	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2020-523)

July 15, 2022	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2022-544)
December 1, 2022	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2022-848)

Table of Contents

1. General	I
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)	13
	2.7.7 Measures to prevent damage to piping due to excavation works (not applica-	ıble) 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	15
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	16
	2.10.2 Boundary fences	17
3. Tecl	hnical 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	18
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

Korea Gas Safety Code

3.3.7 Inspection of accident prevention facilities	19
4. Inspection Standard	20
4.1 Inspection Items	
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	26

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. 2022-9, November 18, 2022) in conformity to the High-Pressure Gas Safety Control the Act, Article 33-2, in accordance with the Act, Article 17-5, Clause 2, has been approved by the Minister of Trade, Industry & Energy (Notification No. 2022-848 of the Ministry of Trade, Industry & Energy, December 1, 2022) and is valid and effective as detailed standards in conformity to the Act, Article 17-5, Clause 1.
- **1.2.2** Conformity to this Code is deemed to conform to Table 6, 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