

Low-Level Waste Plasma Gasification (NW PlasGas) Demonstration Project – Valve List

Doc. No.	ENS-NWPVR-LST-24002
Rev. No.	5

5. List of Actuated Valves

1	2					3	4	5	6	7	9				11		12				13				14				15				
	Valve Tag No.										Valve Type	P&ID Number	Location (Line No. / Equipment No.)	Fluid	Fluid State	Shared (Y/N)	Design Conditions		Operating Conditions		SSC Safety Class		Actuator		Process Connection					Materials of Construction			
	Fluid Code	System No.	Valve No.	Valve Code	Valve Size												Temp. [°C]	Press. [MPa(g)]	Temp. [°C]	Press. [MPa(g)]	Nuclear (N)	Chemical (C)	Tag No.	Failure Position ¹	Pneumatic / Solenoid	Size	Type	Flange Spec.		Flange Rating	Body	Trem	Packing / Seal
-	NH	12	007	SG	15	Globe valve	ENS-NWPVR-PID-24006	Line 15-13-NHNP-007	Nitrogen	Gas	N	38	24820	Ambient	400	Non-classified	SC-3	XV1204D	FO	Pneumatic	15	SW	SS, ASTM A182-F304/304L, ASME B16.5	1500#	SS (ASTM A182-F316/316L)	316 SS	CORROSION-INHIBITED, DIE FORMED FLEXIBLE GRAPHITE with ANTI-EXTRUSION RINGS	Disc, 316 SS	SS (ASTM A182-F316/316L)	-			
-	LW	12	008	CB	250	Ball valve	ENS-NWPVR-PID-24006	Line from Storage Hoopier B1203 to Feed Hoopier B1204	Shredded LLW feed material	Solid	N	38	1960	Ambient	-5	SC-3	SC-3	XV1203B	FC	Pneumatic	250	RF	CS, ASTM A105, ASME B16.5	150#	CS (ASTM A105/A216 WCB)	CS (ASTM A105/A216 WCB)	FLEXIBLE GRAPHITE	316 SS BALL	CS (ASTM A105/A216 WCB)	-			
-	AP	12	009	CG	15	Globe valve	ENS-NWPVR-PID-24006	Line 15-12-APCG-004	Air	Gas	N	38	1965	Amb	-5	SC-3	SC-3	XV1203C	FC	Pneumatic	15	RF	CS, ASTM A105, ASME B16.5	150#	CS (ASTM A216 WCB)	CS (ASTM A216 WCB)	CORROSION-INHIBITED, DIE FORMED FLEXIBLE GRAPHITE with ANTI-EXTRUSION RINGS	13 CR DISC	CS (ASTM A216 WCB)	-			
-	GA	14	050	SG	15	Globe valve	ENS-NWPVR-PID-24005	Line 15-13-GAVP-010	Argon	Gas	N	38	24820	Ambient	400	Non-classified	SC-3	XV1401A	FC	Pneumatic	15	SW	SS, ASTM A182-F304/304L, ASME B16.5	1500#	SS (ASTM A182-F316/316L)	316 SS	CORROSION-INHIBITED, DIE FORMED FLEXIBLE GRAPHITE with ANTI-EXTRUSION RINGS	Disc, 316 SS	SS (ASTM A182-F316/316L)	-			
-	NH	14	051	SG	15	Globe valve	ENS-NWPVR-PID-24005	Line 15-13-NHNP-008	Nitrogen	Gas	N	38	24820	Ambient	400	Non-classified	SC-3	XV1401B	FC	Pneumatic	15	SW	SS, ASTM A182-F304/304L, ASME B16.5	1500#	SS (ASTM A182-F316/316L)	316 SS	CORROSION-INHIBITED, DIE FORMED FLEXIBLE GRAPHITE with ANTI-EXTRUSION RINGS	Disc, 316 SS	SS (ASTM A182-F316/316L)	-			
-	OS	14	052	SG	15	Globe valve	ENS-NWPVR-PID-24005	Line 15-13-OSVP-012	Oxygen	Gas	N	38	24820	Ambient	400	Non-classified	SC-3	XV1403L	FC	Pneumatic	15	SW	SS, ASTM A182-F304/304L, ASME B16.11	1500#	SS (ASTM A182-F316/316L)	316 SS	CORROSION-INHIBITED, DIE FORMED FLEXIBLE GRAPHITE with ANTI-EXTRUSION RINGS	Disc, 316 SS	SS (ASTM A182-F316/316L)	ATEX Rated			
-	NH	14	053	SB	15	Ball valve	ENS-NWPVR-PID-24005	Line 15-13-NHNP-009	Nitrogen	Gas	N	38	24820	Ambient	400	Non-classified	SC-3	XV1404A	FO	Pneumatic	15	SW	SS, ASTM A182-F304/304L, ASME B16.5	1500#	SS (ASTM A182-F316/316L)	316 SS	CORROSION-INHIBITED, DIE FORMED FLEXIBLE GRAPHITE with ANTI-EXTRUSION RINGS	Disc, 316 SS	SS (ASTM A182-F316/316L)	-			
-	AI	17	175	CB	15	Ball valve	ENS-NWPVR-PID-24014	Line 15-17-AICX-088	Instrument air	Gas	N	38	1965	Ambient	520	Non-classified	Non-classified	XV1712	FC	Pneumatic	15	RF	CS, ASTM A105, ASME B16.5	150#	CS (ASTM A105/A216 WCB)	316 SS	FLEXIBLE GRAPHITE	FLOATING BALL, 316 SS BALL	CS (ASTM A105/A216 WCB)	-			
-	AI	17	176	CB	15	Ball valve	ENS-NWPVR-PID-24014	Line 15-17-AICX-089	Instrument air	Gas	N	38	1965	Ambient	520	Non-classified	Non-classified	XV1713	FC	Pneumatic	15	RF	CS, ASTM A105, ASME B16.5	150#	CS (ASTM A105/A216 WCB)	316 SS	FLEXIBLE GRAPHITE	FLOATING BALL, 316 SS BALL	CS (ASTM A105/A216 WCB)	-			
-	AI	17	191	CB	15	Ball valve	ENS-NWPVR-PID-24014	Line 15-17-AICX-087	Instrument air	Gas	N	38	1965	Ambient	520	Non-classified	Non-classified	XV1711	FC	Pneumatic	15	RF	CS, ASTM A105, ASME B16.5	150#	CS (ASTM A105/A216 WCB)	316 SS	FLEXIBLE GRAPHITE	FLOATING BALL, 316 SS BALL	CS (ASTM A105/A216 WCB)	-			
-	AI	17	192	CB	15	Ball valve	ENS-NWPVR-PID-24014	Line 15-17-AICX-083	Instrument air	Gas	Y	38	1965	Ambient	520	Non-classified	Non-classified	XV1715	FC	Pneumatic	15	RF	CS, ASTM A105, ASME B16.5	150#	CS (ASTM A105/A216 WCB)	316SS	FLEXIBLE GRAPHITE	FLOATING BALL, 316 SS BALL	CS (ASTM A105/A216 WCB)	-			
-	AI	17	193	CB	15	Ball valve	ENS-NWPVR-PID-24014	Line 15-17-AICX-084	Instrument air	Gas	Y	38	1965	Ambient	520	Non-classified	Non-classified	XV1714	FC	Pneumatic	15	RF	CS, ASTM A105, ASME B16.5	150#	CS (ASTM A105/A216 WCB)	316 SS	FLEXIBLE GRAPHITE	FLOATING BALL, 316 SS BALL	CS (ASTM A105/A216 WCB)	-			
-	AP	17	196	CB	40	Ball valve	ENS-NWPVR-PID-24014	Line 40-17-APCG-074	Plant air	Gas	Y	38	1965	Ambient	550	Non-classified	Non-classified	XV1716	FC	Solenoid	40	RF	CS, ASTM A105, ASME B16.5	150#	CS (ASTM A105/A216 WCB)	316SS	FLEXIBLE GRAPHITE	FLOATING BALL, 316 SS BALL	CS (ASTM A105/A216 WCB)	-			
1	AP	14	197	SF	XX	Damper	ENS-NWPVR-PID-24005	Secondary enclosure Y1411	Air	Gas	Y	38	1965	Ambient	-0.05 to 0	SC-3	SC-2	XV1410D	FO	Pneumatic	Note 1	RF	CS, ASTM A105, ASME B16.5	150#	CS (ASTM A216 WCB)	CS (ASTM A216 WCB)	CORROSION-INHIBITED, DIE FORMED FLEXIBLE GRAPHITE with ANTI-EXTRUSION RINGS	13 CR DISC	CS (ASTM A216 WCB)	-			

Notes

- 1 Valve size to be determined and valve to be specified during design of HVAC system
- 2 This valve is shared between the NW PlasGas and CWOPGS Facilities, not as a result of integration of the two facilities, but rather as a result of one centralized instrument air supply system servicing all plasma gasification facilities in V-H2 Building. That system is incorporated into the NW PlasGas Facility.