



McMinnville Water & Light Approved Water Materials List

This is a list of materials approved for use in McMinnville Water & Light water facilities. All material must be AWWA approved; NSF 61 certified (including Annex G / NSF 372 certification for low lead if applicable) and meet *McMinnville Water & Light's Water Specifications & Design Criteria*. All material must be new. Materials not on this list will require a **Variance Application for Deviation**. This request will be reviewed by McMinnville Water & Light's Water Standards Committee for determination of allowance. Contact the Engineering Department at 503-472-6919 x1 to obtain this form.

ITEMS	DESCRIPTION	MANUFACTURER
ADAPTER, FLANGE COUPLING	Ductile Iron fitting	Sigma Tyler Union Or MW&L approved equivalent.
AIR/VACUUM VALVE	Combination Air Relief Valve	Determined by MW&L
AIR/VACUUM VALVE ENCLOSURE	Eccentric cone No. 48MH Cone-ECC-36 with frame and cover indicating "WATER".	Oldcastle Precast Or MW&L approved equivalent.
BACKFILL, ROCK	Class B aggregate base, ¾" minus crushed rock. Compactable to 95% <i>AASHTO T-99 standards</i> .	Any meeting description
BACKFILL, NATIVE	Clean native soil	
BACKFLOW PREVENTER	Shall meet Oregon OHA and MW&L requirements.	Any meeting description.
BACKFLOW PREVENTER, REDUCED PRESSURE - INSULATED ENCLOSURE	Shall be insulated and if needed, a heat source to keep enclosure above 40 degrees Fahrenheit.	Any meeting description.



McMinnville Water & Light Approved Water Materials List

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BACKFLOW PREVENTER, DETECTOR METER	<p>Shall meet Oregon OHA and MW&L requirements. Shall read in "cubic feet".</p> <p>Shall be supplied as part of the assembly from the factory.</p>	Any meeting description.				
BACKFLOW PREVENTER SUPPORT	Model S89	<p>Standon</p> <p>Or MW&L approved equivalent.</p>				
BACTERIOLOGICAL TEST STATION	Eclipse Model #88, freeze proof sampling station	<p>Kupferle Foundry Company</p> <p>Or MW&L approved equivalent.</p>				
CASING END SEAL	Pipe Linx molded end pieces at each end.	<p>Calpico Inc.</p> <p>Or MW&L approved equivalent.</p>				
CASING SKIDS	Model PX Insulators.	<p>Calpico Inc.</p> <p>Or MW&L approved equivalent.</p>				
CHLORINATION TAP	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #ffe0b2;">DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>METER STOP, 1" COMPRESSION ANGLE W/ BRASS SHUT-OFF HANDLE TUBING, 1" COPPER</td> </tr> <tr> <td>CORP STOP, 1" CC (MUELLER) X COMPRESSION</td> </tr> <tr> <td>PLUG, BRASS</td> </tr> </tbody> </table> <p>All material shall meet <i>NSF 61, Annex G, NSF 372 certification.</i></p>	DESCRIPTION	METER STOP, 1" COMPRESSION ANGLE W/ BRASS SHUT-OFF HANDLE TUBING, 1" COPPER	CORP STOP, 1" CC (MUELLER) X COMPRESSION	PLUG, BRASS	<p>Ford</p> <p>Mueller</p> <p>Or MW&L approved equivalent.</p>
DESCRIPTION						
METER STOP, 1" COMPRESSION ANGLE W/ BRASS SHUT-OFF HANDLE TUBING, 1" COPPER						
CORP STOP, 1" CC (MUELLER) X COMPRESSION						
PLUG, BRASS						



McMinnville Water & Light Approved Water Materials List

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CORPORATION STOP	<table border="1" style="width: 100%;"> <tr> <th style="text-align: center;">DESCRIPTION</th> </tr> <tr> <td>CORP STOP, 1" CC (MUELLER) X COMPRESSION</td> </tr> <tr> <td>CORP STOP, 2" IP X COMPRESSION</td> </tr> </table> <p>All material shall meet <i>NSF 61, Annex G, NSF 372 certification.</i></p>	DESCRIPTION	CORP STOP, 1" CC (MUELLER) X COMPRESSION	CORP STOP, 2" IP X COMPRESSION	<p>Ford</p> <p>Mueller</p> <p>Or MW&L approved equivalent.</p>
DESCRIPTION					
CORP STOP, 1" CC (MUELLER) X COMPRESSION					
CORP STOP, 2" IP X COMPRESSION					
COUPLING, COMPRESSION	<p>All material shall meet the current <i>ANSI/AWWA Standard C800 Underground Service Line Valves and Fittings.</i></p> <p>All fittings shall be compression type brass material.</p> <p>All material shall meet <i>NSF 61, Annex G, NSF 372 certification.</i></p>	Any meeting description			
ELBOW, COMPRESSION TYPE	<p>All material shall meet the current <i>ANSI/AWWA Standard C800 Underground Service Line Valves and Fittings.</i></p> <p>All fittings shall be compression type brass material.</p> <p>All material shall meet <i>NSF 61, Annex G, NSF 372 certification.</i></p>	Any meeting description			
FIRE HYDRANT, 150 PSI	<p>All fire hydrants shall meet the current <i>ANSI/AWWA Standard C502 Dry-Barrel Fire Hydrant</i> for compression</p>	<p>Clow Medallion</p> <p>East Jordon Iron Works</p>			



McMinnville Water & Light Approved Water Materials List

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	<p>type main valve, traffic model, dry barrel hydrants. In addition to the standards, fire hydrants shall meet the following MW&L specifications:</p> <ol style="list-style-type: none"> 1) National Standard Specification threads. 2) Operation nut 1-1/2 inch point to flat. 3) Opens counterclockwise. 4) 2 each 2-1/2 inch NST hose ports with cast iron caps. 5) 1 each 4-1/2 inch NST steamer port fitted with a ¼ turn 5" Storz adapter per McMinnville Fire Department requirements. 6) All ports shall be mechanically attached. 7) All public hydrants shall be painted factory safety yellow. 	<p>Kennedy K81A</p> <p>M&H Style 929 Reliant</p> <p>Mueller Super Centurion 250</p> <p>Water Master 5CD250</p> <p>Waterous WB67 250 with epoxy coated shoe</p> <p>Or MW&L approved equivalent.</p>
FITTING, DUCTILE IRON	<p>All fittings shall be ductile iron and meet the current <i>ANSI/AWWA Standard C153 Ductile Iron Compact Fittings</i>. Fittings shall be mechanical joint with rubber gaskets that meet current <i>ANSI/AWWA Standard C111 Rubber Gasket Joints for Ductile Iron Pressure Pipe and Fittings</i>. In addition, all fittings shall meet the following MW&L specifications:</p> <ol style="list-style-type: none"> 1) The exterior of all fittings shall have a petroleum-asphaltic coating. 	<p>McWane</p> <p>Sigma</p> <p>Tyler Union</p> <p>United States Pipe Company</p> <p>Or MW&L approved equivalent.</p>



McMinnville Water & Light Approved Water Materials List

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	2) The interior of all fittings shall be cement/mortar petroleum-asphaltic lined in accordance with current <i>ANSI/AWWA Standard C104 Cement Mortar Lining for Ductile Iron Pipe and Fittings.</i>	
GASKET	Pipe Gasket Meeting Manufacturers Specifications	McWane United States Pipe Company Or MW&L approved equivalent.
GASKET LUBRICANT	Shall meet <i>NSF/ANSI Standard 61-certification</i> for use in potable water systems.	McWane United States Pipe Company Or MW&L approved equivalent.
JOINT RESTRAINT, ASSEMBLY	Megalug Series 1100 MJ Field Lok Gasket	EBAA Iron Romac United States Pipe Company Or MW&L approved equivalent.
JOINT RESTRAINT, THRUST BLOCK	Concrete, 14 day strength of 3000 psi.	Any meeting description
METER BOX, 1" SERVICE	Lid: Brooks 37S Cast Iron Cover: Brooks 37S Box: Brooks 37S	Utility Vault - Style (Oldcastle Precast) Brooks Or MW&L approved equivalent.
METER BOX, 2" SERVICE	Lid: Brooks 66ST 3-T	Utility Vault - Style



McMinnville Water & Light Approved Water Materials List

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	Cover: Brooks 66S Box: Brooks 66	(Oldcastle Precast) Brooks Or MW&L approved equivalent.
METER BOX, TRAFFIC LID	Meter boxes should not be in a drivable area.	1" Service: Oldcastle B1324 2" Service: Oldcastle B1730
METER BOX VAULT, 3" - 10" METER	See Specs, V676, V687, to determine vault size for meter; See VAULTS, VAULT DOORS, VAULT LADDERS, VAULT MASTIC for their description and requirements.	Oldcastle Precast Or MW&L approved equivalent
METER STOP, ANGLE 1" COMPRESSION X METER	Mueller 300 Ball Angle Meter with brass shut-off handle (B-20298-99000) <i>All material shall meet NSF 61, Annex G, NSF 372 certification.</i>	Mueller Or MW&L approved equivalent.
METER STOP, ANGLE 2" COMPRESSION X METER	Mueller 300 Ball Angle Meter with brass shut-off handle (B-20298-99000) <i>All material shall meet NSF 61, Annex G, NSF 372 certification.</i>	Mueller Or MW&L approved equivalent.
METER SUPPORT	Model S89	Standon Or MW&L approved equivalent.
METER, WATER	MW&L to Supply	MW&L to Supply
PIPE, 1" COPPER TUBING	Type K soft copper	Any meeting description
PIPE, 2" COPPER TUBING	Type K hard copper	Any meeting description



McMinnville Water & Light Approved Water Materials List

ITEMS	DESCRIPTION	MANUFACTURER
PIPE, DUCTILE IRON	<p>All Ductile Iron Pipe shall meet the current <i>ANSI/AWWA Standard C151 Ductile-Iron Pipe, Centrifugally Cast</i> and be cement mortar lined, and be "push on" joint. Listed below are the specific pipe specifications for water distribution system pipe:</p> <ol style="list-style-type: none"> 1) All Ductile Iron pipe shall be a minimum of Class 52. 2) Cement mortar lining shall meet current <i>ANSI/AWWA Standard C104 Cement Mortar Lining for Ductile-Iron Pipe and Fittings</i>. 3) Rubber Gasket Joints must meet current <i>ANSI/AWWA Standard C111 Rubber Gasket Joints for Ductile-Iron Pressure Pipe and Fittings</i>. 4) All pipe shall be manufactured in North America. 5) Shall be Tyton Joint. 	<p>McWane United States Pipe Company</p> <p>Or MW&L approved equivalent.</p>
SERVICE SADDLE FOR ACP (ASBESTOS CEMENT PIPE)	Ductile iron with stainless steel straps	<p>Romac: Style 101S, 101NS, 202S, 202NS</p> <p>Or MW&L approved equivalent.</p>
SERVICE SADDLE FOR DUCTILE IRON PIPE	Ductile iron with stainless steel straps	<p>Romac: Style 101S, 101NS, 202S, 202NS</p> <p>Or MW&L approved equivalent.</p>
TAPE,	Barrier Post warning tape.	Any meeting description



McMinnville Water & Light Approved Water Materials List

ITEMS	DESCRIPTION	MANUFACTURER
WARNING/IDENTIFICATION	Type 3 high intensity reflective tape. Color: Yellow	
TAPPING SLEEVE FOR ACP, CI, DI AND STEEL PIPE	Full Circle Stainless Steel restrained via a thrust block.	Romac Or MW&L approved equivalent.
VALVE, BALL	1" – Mueller 300 Ball Angle Meter with brass shut-off handle (B-20298- 99000) 2" – Mueller 300 Ball Angle Meter with brass shut-off handle (B-20298- 99000) All material shall meet <i>NSF 61,</i> <i>Annex G, NSF 372 certification.</i>	Mueller Or MW&L approved equivalent.
VALVE, BOX	18" flange up valve box & "W" cover. Part No. 910, H-20 rating.	Olympic Foundry Or MW&L approved equivalent.
VALVE BOX, RISER	6" schedule 40 PVC sewer pipe	Any meeting description
VALVE, BUTTERFLY	All distribution valves 12 inch diameter and larger, with the exception of tapping valves, shall be Butterfly Valves, and shall be rubber seated and shall meet current <i>ANSI/AWWA</i> <i>Standard C504 Rubber-Seated</i> <i>Butterfly Valves.</i> In addition to these standards, Butterfly Valves shall meet the following MW&L specifications. 1) All operating nuts shall be 2 inch square nuts. 2) All valves shall open in a counter clockwise direction	Clow Dezurik M&H Mueller Pratt Or MW&L approved equivalent.



McMinnville Water & Light Approved Water Materials List

ITEMS	DESCRIPTION	MANUFACTURER
VALVE, GATE	<p>All distribution valves 2 inch through 10 inch diameter shall be resilient-seated gate valves and shall meet current <i>ANSI/AWWA Standard C509 Resilient-Seated Gate Valves for Water Supply Service</i></p> <p>All tapping valves regardless of size must be resilient-seated gate valves. In addition, all gate valves shall meet the following MW&L specifications:</p> <ol style="list-style-type: none"> 1) The valve body interior shall have epoxy coating. 2) All operating nuts shall be 2 inch square nuts as specified in current <i>ANSI/AWWA Standard C509</i>. 3) All valves shall open in a counter clockwise direction. 4) The stem seals shall be O rings as specified in current <i>ANSI/AWWA Standard C509</i> 	<p>American Darling American Flow Control Clow Kennedy M&H Mueller United Water</p> <p>Or MW&L approved equivalent.</p>



McMinnville Water & Light Approved Water Materials List

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VAULTS	577-LA W/ 57-T-2-332P lid 676-LA W/676-T-2-332P lid 687-2-LA W/ 687-T-2-332P lid 5106-1-LA W/ 5106-3-T-2-332P lid 1) Vault shall have galvanized, wallmount, OSHA approved ladder. 2) Vault shall have two galvanized, spring assisted, H-20 traffic rated doors. Doors shall open toward the short side (end) of the vault. 3) Specify knockouts be offset. 4) If available, "WA" models eliminate "C-channels" found in "LA" vaults.	Oldcastle Precast Or MW&L approved equivalent.
VAULT, DOORS	Two galvanized, spring assisted, H-20 traffic rated doors opening toward short side of vault. See Spec: V577, V676, V687, V5106	Oldcastle Precast Or MW&L approved equivalent.
VAULT, GROUT	Water tight, non-shrinking, long life	Any meeting description
VAULT, LADDERS	Galvanized, wall mounted, OSHA approved, with locking extension out of vault.	Any meeting description
VAULT, MASTIC	Bituminous Mastic	Oldcastle Precast Or MW&L approved equivalent.
VAULT, SUMP PUMP	Required in backflow preventer vaults.	See City of McMinnville Building Department requirements.



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ITEMS	DESCRIPTION	MANUFACTURER
WATER SERVICES 1" & 2"	<ol style="list-style-type: none"> 1) All material shall meet <i>NSF 61, Annex G, NSF 372 certification</i> as of January 4, 2014. 2) All material shall meet the current <i>ANSI/AWWA Standard C800 Underground Service Line Valves and Fittings</i>. 3) All fittings shall be compression type brass material. 4) All direct tap fittings shall have CC threads for 1 inch only. 5) Approved Teflon joint compound or triple wrap Teflon tape shall be used on all threaded pipe fittings. 6) NPT threads shall be used on corporation stops when a tapping saddle is used. (This applies to two inch services only or one inch services on Cast Iron mains.) 7) All 1 inch service lines shall be Type K soft copper. 8) All 2 inch diameter pipe shall be Type K hard copper. 9) All angle meter stop valves (See Specs: WMS-1 & WMS-2) shall be installed a minimum of 10 inches below the top of the meter box. 10) All water meter boxes shall be installed to finish grade. 11) Meter setters shall be approved on a case by case basis by MW&L. 	Any meeting description



McMinnville Water & Light
Approved Water Materials List

ITEMS	DESCRIPTION	MANUFACTURER
WIRE, TRACER	Blue #10 AWG Solid Copper UF type wire, with Cross Linked Polyethylene	Any meeting description