

**DRINKING WATER - WELL HOUSE AND PUMP INSTALLATION PLAN REVIEW CHECKSHEET**

July 2014

Supply Name _____	WSSN _____
Design Engineer _____	Rec. Date _____
Review Engineer _____	Review Date _____
_____ # of Plan Copies	PE Seal Yes No
_____ # of Spec Copies	PE Seal Yes No
_____ Addendum	

**References**

<b>WELL HOUSE AND PUMP INSTALLATION</b>		10 States	Act 399 & Rules	Sugg. Prac.
<b>WELL HOUSE STRUCTURE</b>				
1.1	Grading (well house and access road protected from flooding, floor slab at/above grade)	3.2.4.10b,c 2.20	R816, R826, R1014	P8(15,16)
1.2	Building drainage/flooding protection (floor drains/outlet pipes or sump and pump)			P10(10a)
1.2a	Floor drains (floor slab sloped toward floor drain or wall outlet, no sewers in isolation area, drains to grade)	2.3.d, 6.2e,f	R811	P8(12), P10(10a)
1.2b	Sump and pump (adequate size to prevent well house flooding, power reliability, discharge away from foundation)			
1.3	Dimensions/layout (clearance from walls, headroom for working on pump/motor, clear space in front of electrical panels)	2.3, 2.5, 5.1.12.a, 6.2.2		
1.4	Adequately sized access (doors, windows, roll-up doors, roof hatches)	2.3f, 6.2.2		
1.5	Safety/security (locks, cameras, entry alarms)	xxv-vi, 2.18, 2.19, 6.1.1.d	R1016	
1.6	Electrical (lighting, general service outlets, dedicated chem. feed outlets, backup power, switchgear protected from flooding)	2.5, 2.6, 3.2.1.3		
1.7	Backup power (size, capacity, fuel type, containment, manual/automatic switchover, permanent or portable)	2.6, 6.6.6, 3.2.1.3	R1206	P10(10c)
1.8	Building water supply (proper backflow prevention on points of use)	2.11, 5.1.6		
1.9	Chemical feed (building size, layout, appurtenances - see Chemical Feed Plan Review Checksheet for add'l requirements)			
1.10	Mechanical (adequate heat, ventilation, dehumidification)	6.2.4,5,6		
<b>PIPING, VALVING, AND APPURTENANCES</b>				
2.1	Piping size (acceptable flow velocities, forces, adequate supports/joint restraint/blocking)	3.2.7.3.a, 6.6.2		
2.2	Amount of above-grade piping (adequate length for chemical feed, mixing, sampling, meter installation, valves, etc.)	3.2.7.3.a, 5.0.2.d		
2.3	Check valves - proper installation/location			
2.3a	Vertical turbine installations (air/vacuum relief needed, proper location with respect to meter and chemical feed)	3.2.7.3.a.6	R828	P8(26)
2.3b	Submersible pumps (cannot create buried suction lines, return flow past check valve needed)		R820	
2.4	Pump to Waste Piping (screened/capped, terminates outside, properly restrained, splash pad)	3.2.7.3.a.7, 3.2.7.3.b	R829	
2.5	Meter (each well or each well field)	3.2.7.3.a.4, 5.1.2.c	R829, R1005	P8(25)
2.6	Required appurtenances on each well (see Well Construction Plan Review Checksheet for additional requirements)	3.2.7.3.a	R828	P8(24)
2.7	Required appurtenances/controls in well house (see Pumping Facility Plan Review Checksheet for add'l requirements)	3.2.7.3.a	R829	
2.8	Disinfection of well house piping (specify method/procedure)	2.15	R831	
<b>PUMP INSTALLATION</b>				
3.1	Pump Design - Capacity, Setting, Drawdown (refer to Type I Well Approval Procees Checksheet and Aquifer Test Policy)	3.2.5.1	R827, R830	P8(28-33)
3.2	Vertical Turbine (concrete pump base, watertight connection to top of casing, lubrication, backspin prevention)	3.2.7.1, 6.6.7, 6.6.8		P8(26,27)
3.3	Submersible (secure, gasketed, vented cap, secure electrical cable)	3.2.7.2		
3.4	Drop Pipe (materials, joints, restraint, centering in casing)	3.2.7.3.c		
<b>CONSTRUCTION PERMIT NUMBER AND ISSUE DATE</b>				