

This bulletin is intended to provide direction on the steps required to ensure pumped sanitary systems are administered consistently and are in compliance with the BC Plumbing Code.

### **SANITARY SUMPS SERVING A DWELLING\***

Pumped sanitary systems serving all plumbing fixtures in a dwelling will require a registered professional to certify the design from the inlet connection of the sump to a point where gravity drainage can once again be achieved. Engineer's sealed drawings, and schedule B or sealed memo from the engineer outlining their responsibility for code compliance and installation review shall be included for the design at the time of building permit application. \*\*

### **SANITARY SUMPS SERVING LESS THAN AN ENTIRE DWELLING\***

Pumped sanitary systems serving less than a full dwelling and connected to the building's gravity sanitary building drain, or sewer within the property are permitted to be sized by a journeyman plumber with inspections reviewing the installation conducted by the City of Campbell River. \*\*

*\* Dwelling including houses, secondary suites, duplex units, apartment units, secondary dwellings etc.*

*\*\* The need for a sanitary pump system should be noted on the permit application or drawings at time of application.*

### **BC PLUMBING CODE**

The BC Plumbing Code requires:

- That all piping, fittings, and joints used in pressure sewer, force main or sump pump discharge applications shall be able to withstand at least 1 ½ times the maximum potential pressure developed in the system.
- Pumped system testing shall be through pressure testing of the system assembly and not through a 3.0m water column test as typically used for gravity drainage systems.
- Nominally horizontal ABS & PVC above ground piping (<45 degrees/horizontal) to be supported every 1.2m at the end of branches and at changes in direction or elevation.
- All piping and fittings shall conform to the applicable standard, location and application as provided in BCPC table A-2.2.5, to A-2.2.8. examples include:
  - o PVC pipe: CAN/CSA-B137.3 and PVC Sch.80 fittings: ASTM 2467; these are permitted to be used above and below ground, **other than hot water systems.**
  - o ABS Pipe: ASTM F 628 and ABS fittings: CAN/CSA-B181.1, these are permitted to be used for above and below ground applications.
- All sumps shall be vented, water/airtight and the discharge pipe shall include a union, backwater valve and shut off installed in the sequence in the direction of discharge.

### **MACERATING TOILET SYSTEMS**

Macerating toilet systems shall only be permitted where a gravity drainage system is not available. They shall be certified to ASME A112.3.4/CSA-B45.9, utilize a minimum ¾" discharge line and be vented through minimum NPS 1 1/2 vent. Macerating toilets are based on 4 fixture units and subsequently are required to be connected to a 2" minimum branch or similar nominally horizontal soil or waste pipe. All soil or waste pipes shall have sufficient additional capacity to accept the fixture units of the macerating toilet or an increase to the receiving pipe will be required.

*For further information contact the Building Division at [Building@campbellriver.ca](mailto:Building@campbellriver.ca) or 250-286-5757*