

Memorandum

To Manager Customer Connections, Manager Asset Solutions, Group Manager Resources, Network Compliance Auditors, Option 2 Contractors, Developers, Civil Contractors

Copy Manager Network Engineering, Engineering Standards Manager

Date 27 February 2008

Subject **Network Compliance Bulletin #19** (Conduit for Underground Electrical Projects)

There have been a number of recent situations where incorrect conduit is being used on underground projects, this memorandum has been prepared to remind those involved in the construction of underground electrical infrastructure that the conduits installed must be in accordance with the CitiPower / Powercor Technical Standards.

Rigid Plain PVC Orange Conduit is approved whereas Wafer Type PVC Orange Conduit is not approved for use in CitiPower and Powercor, even though both conduits satisfy the Australian Standards AS/NZS 2053.

The conduit requirements are detailed in the **CitiPower/Powercor Technical Standards - (GC011 Conduit & Cable Pulling – Physical Data – (section B & 5)**. Standards GA211 and GC031 are currently being revised to reinforce the requirement.



Wafer Type Orange Conduit is not approved.

Extracts from the Technical Standards - GC011 Conduit & Cable Pulling – Physical Data (sections -)
B. General

The standard conduit used in CitiPower / Powercor's underground network is solid wall heavy duty unplasticised polyvinyl chloride polymer (UPVC) manufactured to AS/NZS 2053. The wall thickness is "heavy-duty", to complying with the mechanical protection as defined in the Electrical Safety (Network Assets) Regulations 1999. The heavy duty corflo or sandwich construction conduits shall not be used in CitiPower / Powercor network

5. Non-Approved Sandwich construction PVC Conduit

*There is another type of orange PVC rigid conduit produced to AS/NZS 2053. The wall of this conduit is of sandwich construction. The outer and inner most layer of the conduit wall is made of solid homogeneous PVC material and the middle layer is made of PVC foam material. It is a cheaper alternative to solid wall conduit. The sandwich construction conduits are **not** approved for use in CitiPower and Powercor's network, as experience has shown that they are more susceptible to damage during and after installation.*

Should you have further queries contact Les Ferris ph. 53272404 or Graeme Davenport ph. 53272238

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