

Project Profile

SEWAGE DISTRIBUTION PIPELINE BANGALORE, INDIA

INDUSTRY : INFRASTRUCTURE
CLIENT : BWSS
MANUFACTURER : NUKOTE COATING SYSTEMS
DISTRIBUTOR : NUKOTE INDIA
CONTRACTORS : INDIA HUME PIPE CO
: JPL/KBR JV
: LARSEN & TOUBRO
: RAMKY INFRASTRUCTURE
APPLICATOR : BDS PROJECTS INDIA
LOCATION : BANGALORE, INDIA
SYSTEM : NUKOTE ST / EP PRIME II
APPLICATION : INTERNAL PIPE LINING
COATED AREA : 200,000 m² TO DATE
COMPLETION : IN PROCESS 2009-2011



DESCRIPTION

This project was initiated following Nukote Coating Systems International and Nukote India Private Ltd sponsoring of World Water Day in May 2008. At that time the project was in the design stage and discussions were held on specification and application methods. Testing and feasibility studies were carried out and in Q2 2009 the project was put out to tender. The project was broken down into 17 packages as the pipeline covered more than 150 kilometres and included not only the coating works but the piping and installation from start to finish. Nukote ST and EP Prime II system was specified by the client with the contractors tendering utilizing this system as the internal coating system to be utilized.



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To date four contractors have initiated several of the bid packages and have purchased material from Nukote Coating Systems US facilities directly for duty free delivery to India. The prime contractors who are carrying out the works are India Hume Pipe, JP Hind, Larsen & Toubro and Ramky Infrastructures with the various package completions ranging from complete to in process. More bid packages are in process as of the date of this profile.

All of the coating application works are being carried out by BDS Projects India who in turn subcontract to the various general contractors involved with the projects packages. The coatings are being applied in a covered yard within the premises of the contractor's selected pipe manufacturing factory. The location of the coating works varies dependent on which package is being implemented at any given time. The coated concrete pipes diameters vary 900 mm to 2400 mm are checked and cleaned /ground to remove any surface roughness if any. This is then followed by application of the Nukote EP Prime II Primer at 100 microns (0.1mm or 4-mil), followed by application of Nukote ST Pure Polyurea at 1500 microns (1.5 mm or 60-mil).



After coating the pipes are then transported to the right of way and installed (slip joint design) and the applicator then applies a joint closing method which involves a light abrasion over both sides of the slip joint, followed by an application of Nukote IC Prime inter-coat primer at 40 microns (.04mm or 1.6-mil) followed by application of Nukote ST at 1500 microns (1.5mm or 60 mil). Both sides of the joint closing coating are masked off to providing a linear delineation and to avoid over-spray.

As a secondary, yet integral part of the project, the systems access and maintenance vaults are also coated with the same Nukote ST and EP Prime combination to provide the same level of protection throughout the distribution system.

These vaults and manholes are cast structures, coated once again in the manufacturers facility and then transported to the right of way for installation. Penetrations and connections of the pipes to the vaults are also integrated into the complete coating system providing a seamless system from the beginning to the end of the distribution system



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