



REPORT ON CORROSION CONTROL SERVICES AND FACILITY PAINTING OF UNIT 14 PRODUCED WATER PLANT

REVISION HISTORY

Rev	Description	Status	Date	Prepared by	Review & Approved by
0	Report on Corrosion Control Services and Facility Painting Of Unit 14 Produced Water Plant	Issued for Approval	18/04/22	Osunkoya Ruth	Opel Joel

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1.0 SCOPE

The scope of work for this project is to carry out localised maintenance corrosion control and painting for unit 14 vessels. Scope includes the CPI and ISF vessels as well as the package skids for the 5 trains. The tag no of the ISF vessels are V-1402 A/B/C/D/E and the tag no for the CPI are V-1401 A/B/C/D/E/F/G/H/I/J. The total area covered is about 1900sqm.

2.0 INTENT

To maintain asset integrity, protect from weather conditions and control the corrosion progress of these vessels in order to increase their life in service.

3.0 EXTENT OF WORK

CPI Vessels- Surface preparation, priming and painting

ISF Vessels - Surface preparation, priming and painting

Package Skid-Surface preparation, grit blasting, priming and painting

4.0 HSE

- A documented HSE statement and JHA which specifies the safety precautions that are to be adhered during the job execution was provided
- Required certificates ex. Medical certificates etc. of the work force was produced to Shell for verification and acceptance before commencing the contract.
- Permit-to-Work was used daily during work execution.
- Working at heights required scaffolding safety harness usage.
- Toolbox meeting was conducted with all the personnel involved daily.
- A muster point was identified in a safe area outside of the work site
- Appropriate Personal Protective Equipment (PPE) was provided for all the personnel in the work and their mandatory use enforced at all times.
- Hazardous material handling and disposal was as per Shell HSE requirements.

5.0 PAINT OR COATING MATERIALS

All paint and coating materials used was fully qualified in accordance with Shell DEP 30.48.003.

When required new coating material compatibility test was to be carried out with existing coating.

6.0 PREPARATORY WORKS

- Prior to work commencement, all safety, quality control activities and operational aspects of the work was fully discussed between SPDC and Contractor and a clear definition of the areas of responsibility established.
- All required permission and security pass for personnel and equipments that will be taken back was obtained.
- Mobilization to site of personnel and equipment was achieved safely.
- Materials used for activity was stored in safe condition, away from the harsh weather conditions.
- A Permit to Work for activity was obtained from Permit Control Office, covering the type of work and hazards associated with painting works.
- Barriers and warning signs were placed as required to demarcate working areas.
- The appropriate scaffolding was erected around the vessels to safely carry out work activities.

7.0 WORK INSTRUCTIONS

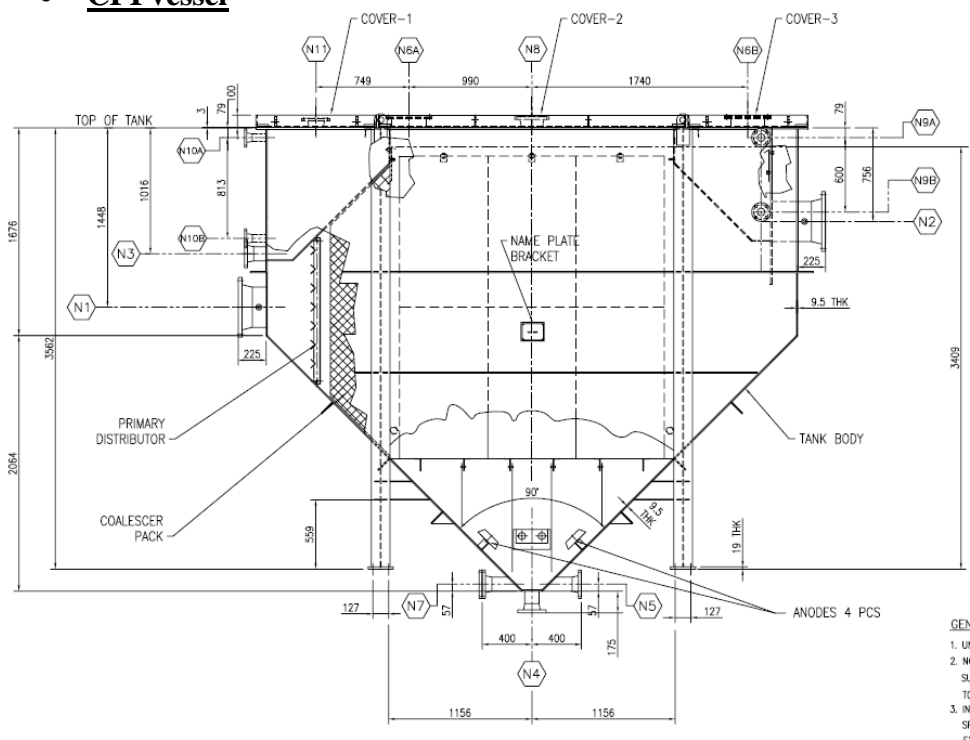
The activities were carried out according to the work instructions below culled from the document: BOGT Surface Preparation and Painting Procedure for ISF and CPI package.

- Application of the coating systems shall be carried out in accordance with the best standard practise and by competent tradesmen.
- All paint and finishes shall be of the approved type, colour and manufacturer. They shall be obtained from approved suppliers with original seal. All paints shall be applied strictly in accordance with the manufacturer's instructions. Paint mixing of different manufacturer will not be permissible.

- Activity was carried out with adherence to the sequence of Procedure/method statement and ITP developed as per Shell DEP 31.48.00.31.
- All paint surfaces shall be dry, free from condensation and efflorescence before the application of precedence coat and precautions shall be taken to prevent dust from mixing with the paint.
- Surface preparation, wherever possible shall be carried out by dry blast cleaning. Where dry blast cleaning is not feasible for instance due to limited access, risk of damage to equipment, light gauge steel, proximity to electrical components or instrumentation, power tool cleaning shall be applied, subject to buyer's approval. This shall be followed by solvent cleaning prior to painting.

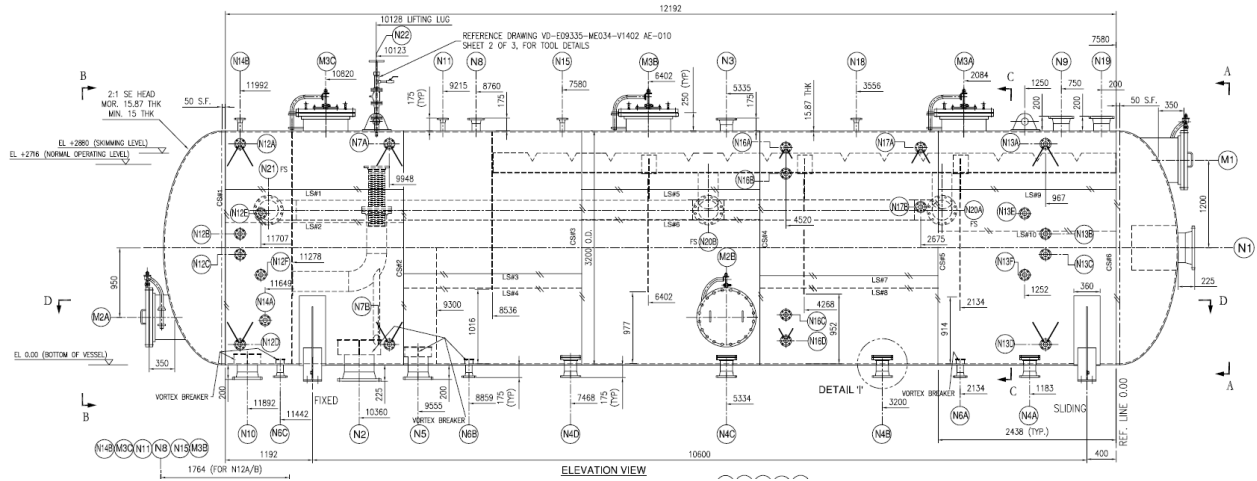
8.0 ACTIVITY REPORT

- **CPI vessel**



A total of 10 numbers of CPI vessels (2 per train) was worked on during this project. The surface area for each vessel was 61.42m². This brings the total area for the 10 vessels to 614.2m².

- **ISF Vessel**



A total of 5 no's of CPI vessels was worked on during this project. The surface area for each vessel is 143.7m². This brings the total area for the 5 vessels to 718.5m².

- **Skid**

A total of 5 no's of skids was worked on during this project. The surface area for each of the skid is 50m². This brings the total area for the 5 skids to 250m².

- **Pipings**

A number of associated pipings on all the trains in unit 14 were painted. The total surface area for these pipings is approximately 400m².

Total Surface Area covered in this project = S.A of ISF vessels+ S.A of CPI vessels+ S.A of skids

$$= 614.2 \text{ m}^2 + 718.5 \text{ m}^2 + 250 \text{ m}^2 + 400 \text{ m}^2$$

$$= \underline{\underline{1,982.7 \text{ m}^2}}$$

8.1 PICTURES

Before Pictures:









Progress Pictures:



Completed Pictures:





9.0 REFERENCES

- Shell specification DEP. 30.48.00.31 Protective coatings for onshore and offshore facilities.
- Surface preparation and painting procedure for CPI and ISF package.
- Other International Standards and Specification as appropriate.