



**CORRIGENDUM**

**ADDENDUM NO. 04 DATED 06.10.2017**

**TO**

**TENDER NO. SDG5327P18/09 DATED 01.08.2017**

This addendum is issued to revise the item specifications, clauses in Annexure-IA of NIT and Bid Closing/Bid Opening Date as mentioned here under:

**(A) Amendment in Item Specifications**

<b>Item No.</b>	<b>Existing, Material Description</b>	<b>Amended Material Description</b>
110	Bend Bevel Ended, Pre- coated by Heat Shrinkable sleeves, as per ISO-21809-3: <b>3016</b> , Long Radius 90Deg, Fabricated from line pipe 200mm ,NB (8" ) dia , ERW/LSAW/HSAW , Grade API 5L X-46,PSL -2,W/T 6.4mm as per API 5L latest edition having following specification i) Pipe Outside diameter 219.1mm, ii) Thickness:6.4mm, iii) Weight per meter : 33.57 kg/m, iv)Test mill Pressure (Hydraulic): 144kg/sq cm v) Deg of Bend : 90Deg Bend radius R=6D where R is the radius of the bend and D is the diameter.	Bend Bevel Ended, Pre- coated by <b>Polyethylene</b> Heat Shrinkable sleeves, <b>as per ISO-21809-3 latest edition</b> , Long Radius 90Deg, Fabricated from line pipe 200mm ,NB (8" ) dia , ERW/LSAW/HSAW , Grade API 5L X-46,PSL -2,W/T 6.4mm as per API 5L latest edition having following specification i) Pipe Outside diameter 219.1mm, ii) Thickness:6.4mm, iii) Weight per meter : 33.57 kg/m, iv)Test mill Pressure (Hydraulic): <b>144kg/sq cm</b> v) Deg of Bend : 90Deg Bend radius R=6D where R is the radius of the bend and D is the diameter.
120	BEND,45 DEG,NB 200MM, Bevel Ended, Pre- coated by Heat Shrinkable sleeves, as per ISO-21809-3: <b>3016</b> , Long Radius 45 Degree Fabricated from line pipe	BEND,45 DEG,NB 200MM, Bevel Ended, Pre- coated by <b>Polyethylene</b> Heat Shrinkable sleeves, <b>as per ISO-21809-3 latest edition</b> , Long Radius 45 Degree Fabricated from line pipe 200mm (8") NB

	<p>200mm (8") NB diameter, ERW/LSAW/HSAW Grade API 5L X-46, PSL -2, W/T 6.4 mm as per API 5L latest edition having following specification:</p> <p>i) Pipe Outside diameter 219.1mm,</p> <p>ii) Thickness:6.4mm,</p> <p>iii) Weight per meter : 33.57 kg/m,</p> <p>iv)Test mill Pressure (Hydraulic): 144kg/sq cm v) Deg of Bend : 45Deg Bend radius R=6D where R is the radius of the bend and D is the diameter</p>	<p>diameter, ERW/LSAW/HSAW Grade API 5L X-46, PSL -2, W/T 6.4 mm as per API 5L latest edition having following specification:</p> <p>i) Pipe Outside diameter 219.1mm,</p> <p>ii) Thickness:6.4mm,</p> <p>iii) Weight per meter : 33.57 kg/m,</p> <p>iv)Test mill Pressure (Hydraulic): 144kg/sq cm v) Deg of Bend : 45Deg Bend radius R=6D where R is the radius of the bend and D is the diameter</p>
130	<p>Bend Bevel Ended, Pre- coated by Heat Shrinkable sleeves, as per ISO-21809-3:<b>3016</b>, Long Radius 90Deg, Fabricated from line pipe 150mm (6" ) NB dia, ERW/LSAW/HSAW , Grade API 5L X-46,PSL -2, W/T 6.4mm as per API 5L latest edition having following specification:</p> <p>i)Pipe Outside diameter168.3mm,</p> <p>ii)Thickness:6.4mm,</p> <p>iii) Weight per meter : <b>25.55 kg/m</b>,</p> <p>iv) Test mill Pressure (Hydraulic): <b>187kg/sq cm</b> v) Deg of Bend : 90Deg, Bend radius R=6D where R is the radius of the bend and D is the diameter</p>	<p>Bend Bevel Ended, Pre- coated by <b>Polyethylene</b> Heat Shrinkable sleeves, <b>as per ISO-21809-3 latest edition</b>, Long Radius 90Deg, Fabricated from line pipe 150mm (6" ) NB dia, ERW/LSAW/HSAW , Grade API 5L X-46,PSL -2, W/T 6.4mm as per API 5L latest edition having following specification:</p> <p>i)Pipe Outside diameter168.3mm,</p> <p>ii)Thickness:6.4mm,</p> <p>iii) Weight per meter : <b>25.55 kg/m</b>,</p> <p>iv) Test mill Pressure (Hydraulic): <b>187kg/sq cm</b> v) Deg of Bend : 90Deg, Bend radius R=6D where R is the radius of the bend and D is the diameter</p>
140	<p>Bend Bevel Ended, Pre- coated by Heat Shrinkable sleeves, as per ISO-21809-3:<b>3016</b>, Long Radius 45Deg, Fabricated from line pipe 150mm (6" ) NB dia , ERW/LSAW/HSAW , Grade API 5L X-46,PSL -2, W/T 6.4mm as per API 5L latest edition having following specification;</p> <p>i)Pipe Outside diameter 168.3mm,</p> <p>ii) Thickness:6.4mm,</p> <p>iii) Weight per meter : 25.55 kg/m,</p>	<p>Bend Bevel Ended, Pre- coated by <b>Polyethylene</b> Heat Shrinkable sleeves, <b>as per ISO-21809-3 latest edition</b>,Long Radius 45Deg, Fabricated from line pipe 150mm (6" ) NB dia , ERW/LSAW/HSAW , Grade API 5L X-46,PSL -2, W/T 6.4mm as per API 5L latest edition having following specification;</p> <p>i)Pipe Outside diameter 168.3mm,</p> <p>ii) Thickness:6.4mm,</p> <p>iii) Weight per meter : 25.55 kg/m,</p> <p>iv) Test mill Pressure (Hydraulic): 187kg/sq cm,</p>

	<p>iv) Test mill Pressure (Hydraulic): 187kg/sq cm,</p> <p>v) Deg of Bend : 45Deg Bend radius R=6D where R is the radius of the bend and D is the diameter.</p>	<p>v) Deg of Bend : 45Deg Bend radius R=6D where R is the radius of the bend and D is the diameter.</p>
150	<p>Bend,Bevel Ended, Pre- coated by Heat Shrinkable sleeves, as per ISO-21809-3:<b>3016</b>, Long Radius Bend, 45 Deg. Fabricated from Line Pipe 10"(273.1 mm), NB ERW/LSAW/HSAW, Grade X-46, PLS-2, W/T = 7.1 mm as per API 5L latest edition;</p> <ol style="list-style-type: none"> <li>1. Deg of Bend: 45 Deg 2., Bend radius 6D,</li> <li>2. Pipe Out side diameter: 273.1 mm,</li> <li>3. Thickness : 7.1 mm,</li> <li>4. Weight per meter : 46.57 kg/m</li> </ol> <p>Test Pressure: 145 kg/cm<sup>2</sup></p>	<p>Bend,Bevel Ended, Pre- coated by <b>Polyethylene</b> Heat Shrinkable sleeves, <b>as per ISO-21809-3 latest edition</b>, Long Radius Bend, 45 Deg. Fabricated from Line Pipe 10"(273.1 mm), NB ERW/LSAW/HSAW, Grade X-46, PLS-2, W/T = 7.1 mm as per API 5L latest edition;</p> <ol style="list-style-type: none"> <li>5. Deg of Bend: 45 Deg 2., Bend radius 6D,</li> <li>6. Pipe Out side diameter: 273.1 mm,</li> <li>7. Thickness : 7.1 mm,</li> <li>8. Weight per meter : 46.57 kg/m</li> <li>9. Test Pressure: 145 kg/cm<sup>2</sup></li> </ol>
160	<p>Bend,Bevel Ended, Pre- coated by Heat Shrinkable sleeves, as per ISO-21809-3:<b>3016</b>, Long Radius Bend, 60 Deg. Fabricated from Line Pipe 10" (273.1 mm), NB ERW/LSAW/HSAW, Grade X-46, PLS-2, W/T = 7.1 mm as per API 5L latest edition having following specification :</p> <ol style="list-style-type: none"> <li>1. Deg of Bend: 60 Deg,bend radius 6D,</li> <li>2. Pipe Out side diameter: 273.1 mm ,</li> <li>3. Thickness : 7.1 mm ,</li> <li>4. Weight per meter : 46.57 kg/m.</li> <li>5. Test Pressure: 145 kg/cm<sup>2</sup></li> </ol>	<p>Bend,Bevel Ended, Pre- coated by <b>Polyethylene</b> Heat Shrinkable sleeves, <b>as per ISO-21809-3 latest edition</b>, Long Radius Bend, 60 Deg. Fabricated from Line Pipe 10" (273.1 mm), NB ERW/LSAW/HSAW, Grade X-46, PLS-2, W/T = 7.1 mm as per API 5L latest edition having following specification :</p> <ol style="list-style-type: none"> <li>1. Deg of Bend: 60 Deg,bend radius 6D,</li> <li>2. Pipe Out side diameter: 273.1 mm ,</li> <li>3. Thickness : 7.1 mm ,</li> <li>4. Weight per meter : 46.57 kg/m.</li> <li>5. Test Pressure: 145 kg/cm<sup>2</sup></li> </ol>
170	<p>Bend,Bevel Ended, Pre- coated by Heat Shrinkable sleeves, as per ISO-21809-3:<b>3016</b>, Long Radius Bend, 90 Deg. Fabricated from Line Pipe 10" (273.1 mm), NB ERW/LSAW/HSAW, Grade X-46, PLS-2, W/T = 7.1 mm as per API</p>	<p>Bend,Bevel Ended, Pre- coated by <b>Polyethylene</b> Heat Shrinkable sleeves, <b>as per ISO-21809-3 latest edition</b>, 90 Deg. Fabricated from Line Pipe 10" (273.1 mm), NB ERW/LSAW/HSAW, Grade X-46, PLS-2, W/T = 7.1 mm as per API 5L latest edition having following specification :</p>

	<p>5L latest edition having following specification :</p> <ol style="list-style-type: none"> <li>1. Deg of Bend: 90 Deg, bend radius 6D,</li> <li>2. Pipe Out side diameter: 273.1 mm,</li> <li>3. Thickness : 7.1 mm ,</li> <li>4. Weight per meter : 46.57 kg/m</li> <li>6. Test Pressure: 145 kg/cm2</li> </ol>	<ol style="list-style-type: none"> <li>1. Deg of Bend: 90 Deg, bend radius 6D,</li> <li>2. Pipe Out side diameter: 273.1 mm,</li> <li>3. Thickness : 7.1 mm ,</li> <li>4. Weight per meter : 46.57 kg/m</li> <li>6. Test Pressure: 145 kg/cm2</li> </ol>
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**B. Amendment in Annexure-IA of NIT :**

<b>Tender clause no.</b>	<b>Existing Clause</b>	<b>Amended as</b>
<p><b>6.14</b></p>	<p>Para-6.1 to 6.13 shall also cover scope for 3 layer polyethylene coating for the LR bends.</p>	<p><u>SCOPE OF WORK AND SPECIFICATIONS FOR POLYETHYLENE HEAT SHRINKABLE COATING OF LR BENDS:</u></p> <p><b>6.14.1</b> Reference code ISO 21809-3,latest edition, Petroleum and Natural Gas Industries – External Coating for Buried or Submerged Pipelines used in Pipeline Transportation Systems – Part 3 Field Joint Coating.</p> <p>The maximum design temperature of the polyethylene heat shrinkable coating shall be 80 deg C.</p> <p><b>6.14.2</b> The heat shrinkable coating material shall be as follows as per clause 14.2.3 of the reference code ISO 21809-3 :-</p> <p>Type 14B-2 is a cross-linked heat shrinkable polyethylene-base material, with Tmax not greater than 80deg C., which applied with a liquid epoxy, FBE or any other compatible primer.</p> <p><b>6.14.3</b> SURFACE PREPARATION</p> <p>Surface preparation shall be carried out according to clause 14.3 of the reference code.</p> <p><b>6.14.4</b> Application of the coatings</p> <p>Application of the coating shall be carried out in accordance with clause 14.4 of the reference code.</p>

		<p><b>6.14.5 Testing of the applied coatings</b>  Testing of the applied coatings shall be carried out in accordance with clause 14.5 of the reference code.</p> <p><b>Tests to be carried out :-</b></p> <p>i)Thickness (as per Annex B of the code)</p> <p>ii)Holiday detection (As per Annex C of the code)</p> <p>iii)Peel strength (As per Annex H of the code and shall meet the requirements of Table 17)</p> <p>iv)Cathodic disbondment (As per Annex G of the code and shall meet the requirements of Table 17)</p> <p>v)Hot-water immersion test (As per Annex I of the code and shall meet the requirements of Table 17)</p> <p>vi)Impact resistance (As per Annex D of the code and shall meet the requirements of Table 17)</p> <p>vii)Indentation resistance (As per Annex E of the code and shall meet the requirements of Table 17)</p> <p>viii)Lap shear strength (As per Annex J of the code and shall meet the requirements of Table 17)</p> <p>ix)Thermal ageing resistance (As per Annex M of the code and shall meet the requirements of Table 17)</p> <p><b>6.14.6</b> Coating identification shall be as per Table 14.1 of the reference code which shall be furnished to the Company</p> <p><b>6.14.7</b> Property of the type 14B-2 joint coatings — PE-with primer) shall be as per</p>
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		<p>Table 17 of the reference code which shall be furnished to the Company</p> <p><b>6.14.8</b> Data sheet of the primer shall be furnished to the Company as per the reference code.</p> <p><b>6.14.9</b> Data sheet of the Heat Shrinkable materials shall be furnished to the Company as per the reference code.</p> <p><b>6.14.10</b> Conditions of coating application shall be recorded as per the reference code and shall furnished to the Company.</p>
<b>8.1.3</b>	External coating of the bends by using 3 layer side extruded polyethylene coating as per Para-6.0 PART-A.	External coating of the bends by using Polyethylene Heat Shrinkable Sleeve coating as per clause <b>6.14</b> .

**C. Amendment in Bid Closing/Bid Opening Date**

- i) \_\_\_\_\_ New Bid Closing Date & Time: 25.10.2017 (11:00 IST)**
- ii) \_\_\_\_\_ Sale of Tender Documents: 18.10.2017 (15:30 IST)**
- iii) \_\_\_\_\_ New Bid Opening Date & Time: 25.10.2017 (14:00 IST)**

All other terms and conditions of the Bid Document remain unchanged.

Sd/-  
Aayush Somani  
MM (FD) (i/c)  
For GM-Materials  
For Resident Chief Executive