



**निविदा सूचना शुद्धि पत्र/ CORRIGENDUM to Tender Document for Supply, Installation and Commissioning of SCRUBBER SYSTEM**

**(Tender Reference No. : SROL/PUR/SS/01)**

**INVITED BY**

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**द्वारा आमंत्रित**

वैज्ञानिक ई और हेड भारतीय मानक ब्यूरो, दक्षिणी क्षेत्रीय कार्यालय प्रयोगशाला, चौथा क्रॉस रोड तारामानी, चेन्नई 600 113 Ph: 044-22541208, 22541216 mail id : [srol@bis.org.in](mailto:srol@bis.org.in)

यह सभी संबंधित को सूचित किया जाता है कि 28 04 2017 को जारी किए गए निविदा में अनुलग्नक -3 में दी गई विनिर्देश और अनुलग्नक -4 में दिए गए तकनीकी अनुपालन वक्तव्य को निम्नानुसार संशोधित किया गया है।

This is to bring to the notice of all concerned that in the tender floated on 28 04 2017 the specification given at Annexure -3 and the Technical compliance statement given at Annexure-4 are revised as follows.

बोलीदाताओं को सलाह दी जाती है कि इस शुद्धि में जारी किए गए तकनीकी विनिर्देश और तकनीकी अनुपालन वक्तव्य के संशोधन के अनुसार बोलियां जमा करनी होंगी, जिसके बिना बोलियां अवैध मानी जाएंगी।

The bidders are advised to submit the bids as per the revision of Technical specification and technical compliance statement issued in this corrigendum only failing which the bids will be considered as invalid.

जिन लोगों ने पहले ही अपनी बोलियां जमा कर दी हैं उन्हें ईएमडी सहित सभी मामलों में ताजा बोलियां जांचने और पुनः केवल इस शुद्धि के अनुसार जमा करने की सलाह दी जाती है, अन्यथा बोली को अमान्य माना जाएगा।

Those who have already submitted their bids are advised to examine and re-submit fresh bids complete in all respects including EMD, in accordance with this corrigendum only, failing which the bids will be considered as invalid.

## Annexure3

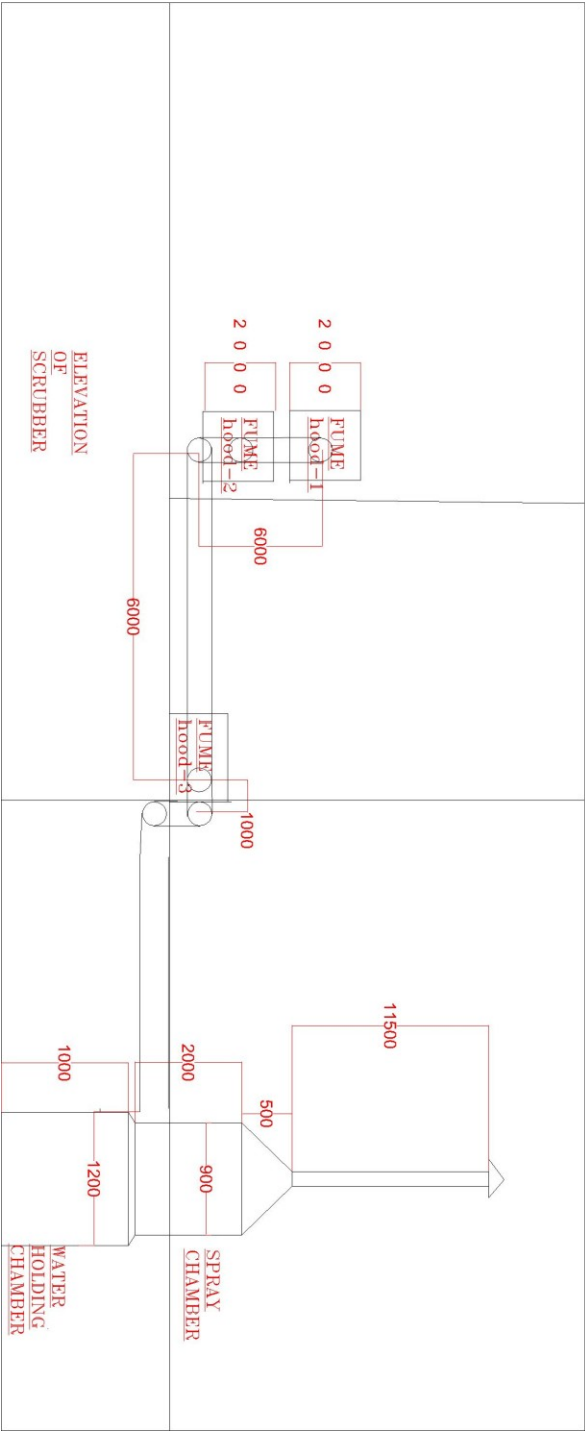
**Technical Specification of SCRUBBER SYSTEM**

<b>S. No.</b> <b>(1)</b>	<b>Component</b> <b>(2)</b>	<b>Requirement</b> <b>(3)</b>
1	Scrubber unit	<ul style="list-style-type: none"> <li>• The absorption/spray portion of scrubber unit should have a diameter of 900 mm (ID) and height of 2000 mm.</li> <li>• The base of scrubber (water holding portion) should be of dia 1200 mm (ID) and height 1000 mm.</li> <li>• The Scrubber should be of acid resistant PP + FRP material for strength and structural stability.</li> <li>• Thickness of PP portion should be 5 mm minimum and FRP coating should be 5 mm minimum.</li> </ul>
2.	Scrubber liquid	<ul style="list-style-type: none"> <li>• The Scrubber should have water circulation system which will absorb acid fumes coming from the Fume cupboards.</li> <li>• A level controller should be provided that opens and closes a water makeup valve and liquid level indicator to maintain the liquid level in the scrubber.</li> </ul>
3.	Drain facility	<ul style="list-style-type: none"> <li>• Provision should be made in the scrubber for neutralizing chemical feed.</li> <li>• Scrubber should be provided with a blow down valve to drain the concentrated/neutralized liquid.</li> </ul>
4.	Water pump	<ul style="list-style-type: none"> <li>• The pump should be of PP fitted with 0.75 KW motor.</li> </ul>
5.	Chimney	<ul style="list-style-type: none"> <li>• The Scrubber outlet should be fitted with a vertical duct made of PP (Minimum 3 mm) + FRP (Minimum 3 mm) material of 12000 mm height (approximately) and dia of 400 mm (ID) minimum. This will serve as the chimney.</li> <li>• The outlet of chimney should be at least 4000 mm above the roof top of the laboratory.</li> </ul>

		<ul style="list-style-type: none"> <li>The outlet of chimney should be covered in such a manner to prevent inflow of outside water/dust in to chimney.</li> </ul>
6.	Blower unit	<ul style="list-style-type: none"> <li>The Blower unit should have Impeller made of FRP material and casing of PP + FRP.</li> <li>It should be mounted on a 5 HP, 1400 RPM, 3 Phase Motor shaft.</li> <li>The Blower should be connected to the outlet of the Scrubber</li> </ul>
7.	Ducts	<ul style="list-style-type: none"> <li>Ducting has to be provided to connect three fume hoods to the scrubber.</li> <li>The exhaust pipes of all the three fume hoods should be of FRP, 200 mm (ID) minimum.</li> <li>The exhaust pipes from the all the three fume hoods should be connected to a single common main duct of FRP material, 300 mm (ID) minimum.</li> <li>Thickness of ducting pipes should be 4.0 mm minimum.</li> </ul>
8.	Dampers	<ul style="list-style-type: none"> <li>A suitable damper at the outlet of each fume hood should be provided to prevent back flow of fumes to the fume hood which is/are not in operation at a particular time.</li> </ul>
9.	Position of scrubber and blower unit	<ul style="list-style-type: none"> <li>The Blower unit and the Scrubber unit shall be positioned on the ground level near the rear entrance of the laboratory building. (Opposite to Mechanical Workshop).</li> </ul>
10	Civil Work	<ul style="list-style-type: none"> <li>All Civil work for installation and commissioning of the scrubber system shall be done by the bidder.</li> </ul>

BUREAU OF  
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SROL CHENNAI

ALL DIMENSIONS ARE IN MM ONLY



**Annexure-4**

स्क्रबर सिस्टम की आपूर्ति, इंस्टालेशन और कमिशनिंग  
**Technical compliance statement by the bidder for  
SCRUBBER SYSTEM**

<b>S. No.</b>	<b>Component</b>	<b>Requirement</b>	<b>Quoted details by the bidder</b>	<b>Deviation from col (2), if any</b>	<b>Remarks</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1	Scrubber unit	<p>The absorption/spray portion of scrubber unit should have a diameter of 900 mm (ID) and height of 2000 mm.</p> <p>The base of scrubber (water holding portion) should be of dia 1200 mm (ID) and height 1000 mm.</p> <p>The Scrubber should be of acid resistant PP + FRP material for strength and structural stability.</p> <p>Thickness of PP portion should be 5 mm minimum and FRP coating should be 5 mm minimum.</p>			
2.	Scrubber liquid	<p>The Scrubber should have water circulation system which will absorb acid fumes coming from the Fume cupboards.</p> <p>A level controller should be provided that opens and closes a water makeup valve and liquid level indicator to maintain the liquid level in the scrubber.</p>			
3.	Drain facility	<p>Provision should be made in the scrubber for neutralizing chemical feed.</p> <p>Scrubber should be provided with a</p>			

		blow down valve to drain the concentrated/neutralized liquid.			
4.	Water pump	The pump should be of PP fitted with 0.75 KW motor.			
5.	Chimney	<p>The Scrubber outlet should be fitted with a vertical duct made of PP (Minimum 3 mm) + FRP (Minimum 3 mm) material of 12000 mm height (approximately) and dia of 400 mm (ID) minimum. This will serve as the chimney.</p> <p>The outlet of chimney should be at least 4000 mm above the roof top of the laboratory.</p> <p>The outlet of chimney should be covered in such a manner to prevent inflow of outside water/dust in to chimney.</p>			
6.	Blower unit	<p>The Blower unit should have Impeller made of FRP material and casing of PP + FRP.</p> <p>It should be mounted on a 5 HP, 1400 RPM, 3 Phase Motor shaft.</p> <p>The Blower should be connected to the outlet of the Scrubber</p>			
7.	Ducts	<p>Ducting has to be provided to connect three fume hoods to the scrubber.</p> <p>The exhaust pipes of all the three fume hoods should be of FRP, 200 mm (ID) minimum.</p> <p>The exhaust pipes from the all the three fume hoods should be connected to a single common main duct of FRP material, 300 mm (ID) minimum.</p>			

		Thickness of ducting pipes should be 4.0 mm minimum.			
8.	Dampers	A suitable damper at the outlet of each fume hood should be provided to prevent back flow of fumes to the fume hood which is/are not in operation at a particular time.			
9 .	Position of scrubber and blower unit	The Blower unit and the Scrubber unit shall be positioned on the ground level near the rear entrance of the laboratory building. (Opposite to Mechanical Workshop).			
10	Civil Work	All Civil work for installation and commissioning of the scrubber system shall be done by the bidder.			

**Note: Quote the actual specifications of equipment to be supplied in col (3), wherever applicable**

**Deviations, if any, from col (2) be quoted in col (4).**