

**PURCHASE ORDER**  
**PT. TRIPATRA ENGINEERS AND CONSTRUCTORS**  
NPWP : 01.339.758.3-081.000

PAGE 1 of 4  
DATE : 10 April 2018

Please transmit all invoices and invoice correspondence in 5 copies to

**PT. TRIPATRA ENGINEERS AND CONSTRUCTORS**  
Indy Bintaro Office Park, Gedung A  
Jl. Boulevard Bintaro Jaya Blok B7/A6  
Sektor VII, CBD Bintaro Jaya Kel. Pondok Jaya, Kecamatan Pondok Aren  
Kota Tangerang Selatan 15224  
Phone : 021 - 29770700 (Hunting) Fax. 021 - 29770701

PURCHASE ORDER NO.  
**9714-STA-3210003571 Rev.0**

Show this order number and complete marks on all packages - shipping papers and invoices

**TO :** TRIMITRA WISESA ABADI, PT  
**ATTN :** MUHAMMAD IRFAN  
**ADDRESS :** JL LIO BARU 37/63 NEGLASARI  
TANGERANG 15121  
**TLP/FAX NO :** 021 5527577 / 021 5527507

**SUB GROUP/DISCIPLINE :** Mech. Static 9714  
**MRS NO :** 9714-T000-139910B-MRS-006A  
**PROJECT TITLE :** MPP NIAS 25 MW  
**TERMS OF PAYMENT :** REFER TO TERMS OF PAYMENT  
**SHIPPING POINT/ DELIVERED TO :** FRN TRIMITRA WORKSHOP, BANTEN

Please Supply, subject to the condition hereon, attached terms & condition and all other attachments hereto, the materials and/on described below and ship to:

**PT. TRIPATRA ENGINEERS AND CONSTRUCTORS**

**C/O :** TRIPATRA OFFICE JAKARTA  
**A/T :** Indy Bintaro Office Park, Gedung A  
Jl. Boulevard Bintaro Jaya Blok B7/A6 Sektor VII, CBD Bintaro  
Jaya Kel. Pondok Jaya, Kecamatan Pondok Aren  
Kota Tangerang Selatan 15224  
**VIA :** ANDY P. WIBOWO / AGUS SUDARYANTO  
TEL : 021 29770700 ; FAX : 021 29770701

**DISTRIBUTION COPY OF THIS P.O. :**

**ORIGINAL :** SELLER

**COPY :** ☐ P.O. ISSUER  
☐ PROCUREMENT MANAGER  
☐ PROJECT MANAGER

☐ ACCOUNT PAYABLE  
☐ CLIENT  
☐ EXTRA

DESCRIPTION	TOTAL PRICE
THIS PURCHASE ORDER IS ISSUED TO COVER THE SUPPLY OF MATERIALS AS PER SCOPE OF SUPPLY, SPECIFICATION AND TERMS AND CONDITIONS AS DETAILED IN ATTACHMENT-1,2,3,4,5 (WHENEVER APPLICABLE) IN THE PURCHASE ORDER.	
WATER TREATMENT and WASTE WATER TREATMENT PACKAGE	IDR 1,695,000,000
TOTAL PRICE FRN TRIMITRA WORKSHOP, BANTEN (EXCLUDING VAT 10%) SAYS : ONE BILLION SIX HUNDRED NINETY-FIVE MILLION Rupiah	IDR 1,695,000,000

FOR INFORMATION ON : ANDY P. WIBOWO / AGUS SUDARYANTO  
THIS ORDER, CALL

SHIPMENT / DELIVERY : REFER TO DELIVERY SCHEDULE  
PROMISED


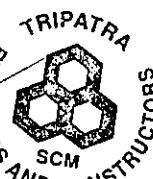
SELLER'S ACCEPTANCE

DATE : \_\_\_\_\_

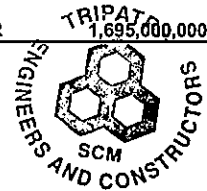
SIGNATURE & COMPANY STAMP \_\_\_\_\_

TITLE : \_\_\_\_\_

ISSUED and APPROVED BY:

  
  
MANVENDRA M. BHADANGE  
TITLE : SVP SCM

NO.	PART NO	DESCRIPTION	DELIVERY DATE	QTY	UOM	UNIT PRICE	TOTAL PRICE
1	ZS000052	WATER TREAT PACK;0.5/2 M3/HR (DEMIN/RO)	10-SEP-2018	1	UN	1,160,000,000	1,160,000,000
		WATER TREATMENT PACKAGE; DEMIN WATER CAPACITY:0.5M3/HR; RO WATER CAPACITY:2M3/HR					
2	ZS000053	WASTE WATER TREAT;SANITARY CAP:15PERSON	10-SEP-2018	1	UN	405,000,000	405,000,000
		WASTE WATER TREATMENT PACKAGE; SANITARY TANK CAPACITY:15PERSON; WITH OILY WATER SYSTEM					
		WASTE WATER TREATMENT (LOCAL PORTION)					
3		ADDITIONAL COST	10-SEP-2018	2	UN	65,000,000	130,000,000
		20 Feet Container c/w Modification, AC and Lighting					
		CONTAINER 20FT					
SUMMARY		TOTAL PRICE FRN TRIMITRA WORKSHOP, BANTEN (EXCLUDING VAT 10%)				Sub-Total AMT	IDR 1,695,000,000
		SAYS : ONE BILLION SIX HUNDRED NINETY-FIVE MILLION Rupiah				Disc/Adj Value	IDR
						TOTAL AMT	IDR 1,695,000,000



**ATTACHMENT-1 PO NO. 9714-ST A-3210003571**  
**GENERAL TERMS AND CONDITIONS OF PURCHASING**

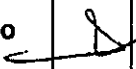




TRIPATRA

## STANDARD TEMPLATE

DOC. NO.  
SCM1-ST-005-001-002

# GENERAL TERMS AND CONDITIONS OF PURCHASING

8	9/30/11	REVISION	SUDARSONO		SUKUMARAN		DHIRA NANDANA	
7	12/08/09	REVISION	SUDARSONO		SUKUMARAN		DHIRA NANDANA	
REV	DATE	DESCRIPTION	PREPARED BY		CHECKED BY		APPROVED BY	



GENERAL TERMS AND CONDITIONS OF PURCHASING

1. DEFINITIONS

**The Vendor**

Means the person, firm or Company to whom the inquiry / Purchase Order is to be issued.

**The Purchaser / TPEC**

Means the party designated as such on the face of the inquiry document / Purchase Order including its agent(s) or successors in interest.

**The Client / Company**

Means the Client for whom the Purchaser is performing work on the Plant for which the goods are to be used.

**The Price**

Means the price stipulated in article 2 hereof.

**The Goods**

Means all the equipment, materials, machinery, etc., to be supplied by the Vendor under the Purchase Order.

**The Plant**

Means the Plant is which the Goods are to be used for or erected for.

**The Site**

Means the place where the plant is to be constructed.

**The Purchase Order**

Means the document bearing that title into which these General Commercial Term and Conditions for purchasing, requisition and all other documents and attachments are incorporated and in which is which the order is described.

**The Requisition**

Means the documents which set the technical specifications of the Goods and the Commercial term of Purchase.

**The Specifications**

Means, in relation to the goods all the technical specifications, drawings and other technical documents supplied by the Purchaser and also such specifications and / or the Purchase and also such specifications and / or other technical documents, if any as may be agreed upon between the Vendor and the Purchaser.

**The Commercial Operation**

Means that the Plant is put on the Operation after being fulfilled in Acceptance test and handed over the Client.

2. THE PRICE

2.1 The Price is the consideration to be paid by the Purchaser to the Vendor for the complete delivery of the goods & performance of all necessary services and obligations in accordance with and required by the Purchase Order & other applicable documents as amended by the parties pursuant to the Purchase Order. Such price shall include any and all services obligation of the Vendor including, but not limited to, inspection, expediting, documentation in accordance with the requisition and shipment in accordance with shipping and packing instruction to the issued by the Purchaser. Such price is a fixed lumpsum and not subject to escalation or adjustments in respect of materials and / or labor costs or any other factor or variation in rates of exchange / Taxes, charges, fees, the Vendors profit and all other expenses are included in the price / Indonesian VAT Tax is excluded from the Vendor scope.

3. NON DISCLOSURE AND SECRECY AGREEMENTS

The Vendor shall handle confidentially all designs, specifications and other technical and commercial information which the Vendor will receive under the Purchase Order (herein after called "information") and in any case shall not use nor copy nor communicate such information to others except in the performance of services which the Vendor undertakes pursuant to the Purchase Order, without prior written consent from the Purchaser. When the Vendor discloses such information to others in compliance with the above mentioned provisions, he shall impose on these parties the same confidentially restrictions as stipulated herein.



#### 4. TITLE AND RISK OF THE GOODS

The property in the Goods shall pass to the Purchaser at the point of FOB Vessel / Aircraft at Port or other place of export shipment when the Purchase Order is on a FOB, CIF, or CFR basis, and when on an ex-work, ex-warehouse, or other trade term basis the property shall pass to the Purchaser at the delivery point itself.

The interpretation of trade terms in the Purchase Order shall be in accordance with Incoterms (International Rules for the Interpretation of Trade Terms) established by The International Chamber of Commerce in 2000 and those supplemented thereto.

#### 5. QUANTITY

The quantity of Goods for which the Purchase Order is issued is based on the current design. In the event of a change in the requirement of Goods for actual construction, Vendor agrees to support and cooperate to accept such change, at the agreed upon price, the schedule for which shall be discussed by Purchaser and Vendor. Similarly if an item is deleted this will be reduced from the scope of supply.

#### 6. QUALITY AS PER SPECIFICATION

Without prejudice to the Purchaser's rights of inspection all Goods delivered and all works done under this Purchase Order must, unless otherwise previously agreed by the Purchaser in writing, be strictly to the quality required and in complete accordance with quality control, engineering and complete specification, drawings description or any other data furnished or adapted by the Purchaser and all plant must be new and in good condition when delivered.

#### 7. QUALITY CONTROL

The Vendor is required to inform the Purchaser his quality control measures and programs normally used by him at various stages of his manufacturing process.

If it is observed by the Purchaser that the quality control measures are inadequate, The

Purchaser has the right to seek the revision or improve the program to suit his requirements.

The Vendor will be obliged to comply with the revised program. The Purchaser or the Client reserves the right to enter the premises of the Vendor as well as that of his sub Vendor, etc., at any stage of manufacturing for carrying out such quality control checks / inspection. The Vendor is expected to get prior approval of the sub Vendor from the Purchaser before release of work to them.

#### 8. TEST AND INSPECTION

The Purchaser and / or the Client reserves the right to inspect or witness the test of the Goods at any time and place including the Vendor's works and its sub Vendor.

The Vendor shall conduct, at his responsibility and expense all test and inspections as required by the specification and / or the requisition. In the event that witness inspection by the Purchaser and / or the Client and / or a person appointed by either of them is required, the costs and expenses arising there from shall be borne by the Vendor, except for transportation, hotel, and general living expense which shall be borne by the Purchaser and / or the Client. In the event that the Vendor's inspection is required at the site, the Vendor's transportation, hotel, and general living expense which shall be borne by the Vendor. It is the Vendor's obligation to repair and replace, without cost or delay anything found defective by test and inspection, and also to bear all cost of reinspection.

Any inspection required by statutory authority governmental regulation or other similar authority on the codes or standards, must be carried out by the Vendor at his responsibility and expense.

Inspection by the Purchaser or the Client or its designee and / or their witnessing of the Vendor's test and inspection shall not relieve the Vendor of any of its responsibilities or liabilities under the Purchase Order, nor be interpreted in any way as implying acceptance of the Goods.



The Vendor shall notify the Purchaser of the date and place at least 4 weeks prior to the date when test and / or inspection is to be made. No test shall be performed without the presence of the Purchaser or his representative, unless this requirement is waived in writing.

Records and / or certificates of each test and / or inspection shall be submitted by the Vendor to the Purchaser regardless of whether the Client and / or the Purchaser attend or do not attend such test and or inspection.

The Vendor shall submit to the Purchaser the following :

8.1.Details of inspection & procedures, test & testing procedures.

8.2.List of testing apparatus/equipment that will be utilized for the above test, including brand name, model & rating.

#### 9. CONFLICTS

In case of discrepancy, either in or among specifications, drawing, the Purchase Order or other documents, the discrepancy shall be promptly pointed out to and submitted to the Purchaser, who shall promptly make a determination in writing. Any adjustment by the Vendor without the Purchaser's determination shall be at the Vendor's own risk and expense.

#### 10. CHANGES

The Purchaser reserves the right, from time to time by written notice to the Vendor, to make changes in and / or additions to the Specifications for the Goods to be supplied under the Purchase Order and the Vendor shall agree to comply with such changes which shall become a part of the Purchase Order. If such changes and / or additions cause an increase and / or decrease in the services and / or obligations of the Vendor under the Purchase Order and / or affect the delivery schedule of the Goods, the Vendor shall intimate to the Purchaser within a period of 10 days the cost of such changes. The Purchaser may instruct the Vendor to proceed with the work and shall amend the price and or delivery time of the Goods.

#### 11. EXPEDITING

The Vendor shall always expedite delivery of the goods and any related work of sub Vendor's and provide the Purchaser with an itemized schedule for Engineering, Procurement, Fabrication and Shipping, which shall be followed by expediting reports including status of deliveries of materials and / or equipment purchased from sub Vendor, if any, biweekly after acceptance of the Purchase Order. If however the Vendor encounters delays in obtaining materials from its sub Vendors or foresees any delays in its own manufacturing works, the Vendor shall immediately inform the Purchaser of such situation and take necessary and adequate measures to recover such delay.

When deemed necessary, the Purchaser or its designee may physically expedite the progress of manufacture and delivery of the Goods, and shall be allowed reasonable access to the Vendor's and / or sub Vendor's works for purpose of expediting.

Expediting made by the Purchaser or its designee in no way relieves the Vendor from its obligations as to the delivery time specified in the Purchase Order.

#### 12. PACKING

The plant must be suitably packed by the Vendor to suit sea & road transport requirements. Packing must be strong enough to prevent damage while handling. The packages should have adequate and proper protective covering or wrapping to combat weather conditions, entry of dirt, water & moisture.

Flanged openings must be covered with wooden blind flanges & gasketed. All events, nipples and their like should be suitably guarded.

Detailed packaging requirements as specified by the Packing & Marking Procedure shall be adhered to.

#### 13. SHIPPING MARKS

All shipments (boxes, packages, pallets, loose pieces) shall bear the following marking clearly made with indelible ink/permanent



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paint on each package prominently in two or three places

NOTE : PLS REFER TO PACKING AND MARKING INSTRUCTIONS AND OR PURCHASING ORDER FOR DETAILS

A special warning mark (if necessary) gross weight and nett weight, package number. Dimension of each package and booking positions. Equipment Tag No (specified by the Company)

### 14. DRAWINGS, REPORTS, MANUALS ETC.

The Vendor shall, at its own expense, furnish to the Purchaser by courier all documents and data required by the Purchaser such as specifications, drawings, inspection reports, mill certificates and microfilms and the like at the time and in number of copies required in the Requisition and or Purchase specification. The Purchaser will examine such documents and data furnished and will return them with comments or request for revision or approval, if necessary. Approval by the Purchaser of such documents and data shall no way relieve the Vendor of any of its obligations under the Purchase Order nor imply that the Purchaser will assume responsibility for the accuracy of such documents

### 15. PROGRESS REPORTS

Vendor shall submit to Purchaser Biweekly progress report covering the status of the progress of materials, manufacturing, fabrication, and delivery status.

### 16. VENDOR'S GENERAL INDEMNITY

The Purchaser shall not be held responsible or liable for any loss, damage or expense resulting from the Vendor's execution of the Purchase Order with the Purchaser and the Vendor shall indemnify and keep the Purchaser indemnified against any loss, damage, expenses, or injury to any property or any person in consequence of any defect in design (not originating with the Purchaser) work of material or from any negligence of the Vendor its servants or agents.

If the Purchaser shall become subject to any such claim the Vendor shall provide all assistance as required by the Purchaser to settle or defend any such claim or proceeding or arbitration arising therefrom.

### 17. GUARANTEE

The Vendor should also guarantee that the Goods to be supplied by him (in so far as they are not designed by Purchaser) may be used and sold any where in the world without infringing any patent, registered design, or similar monopoly rights and Vendor will hold Purchaser indemnified from against any damages, compensation, costs and expenses resulting from any such infringement or alleged infringement.

### 18. WARRANTY

The Vendor shall certify and warrant that Goods conform to the Purchase Order and are new, fit for the purpose for which they intended and free from any defects such as weakness, deficiency, failure, breakdown or deterioration, including faulty design, materials or workmanship.

Should any defects such as weakness deficiency failure, breakdown or deterioration, but not limited, in design, materials, workmanship, operating characteristics or performance of the Goods appear or are discovered within 12 months from the date of a commencement of commercial operation of the Goods, but not later than 18 months from the date of shipment of the Goods as evidenced by the date of Bill of Lading (herein after called defects liability period), the Purchaser shall notify the Vendor of such defects and the Vendor shall, at his expense, do all things necessary to make good the defects as soon as possible after being ordered to do so by the Purchaser and shall compensate the Purchaser from any loss or damage suffered by the Purchaser as a result thereof.

The Vendor warrants that any defects, unless otherwise agreed, shall be remedied by the Vendor in accordance with one or more of the following methods at the Purchasers option.

All the expenses such as the Goods, the transportation, packing, export charge, insurance, air or ocean freight customs duties





and port charges, custom clearance fee, visa & passport charge, daily allowance absence fee etc., necessary to return and reship the defective parts or the whole of the Goods and deputation of the engineers shall be borne by the Vendor.

- i. The defective part or the whole of the Goods shall be returned to the Vendor's work's and after repair or replacement, be delivered to the place designated by the Purchaser.
- ii. The Vendor shall, immediately after receipt of the Purchaser's notice of the defects, ship, at its expense, at the place designated by the Purchaser, the part or whole of the Goods to replace or repair the defects, provided that the defective part or the whole of the Goods shall be returned to the Vendor as soon as practicable after receipt of such replacement part or the whole of the Goods by the Purchaser.
- iii. The Vendor shall immediately after receipt of the Purchaser's notification of the defects, depute engineer(s) to the site at its expense to repair or replace defective part or the whole of the Goods.

It is understood, however, that if so instructed by the Purchaser, shipment under clauses i) and ii) above shall be made by air-freight and in the event that the Vendor does not take prompt action to fulfill its obligations hereunder, the Purchaser or the Client may without prejudice to any of its rights under the Purchase Order, carry out the remedial work by itself and charge the Vendor for the costs of the work. Any parts supplied in replacement of the defective part(s) of the Goods or the Goods repaired pursuant to the foregoing provisions shall be supplied and / or repaired on the same terms & conditions as provided for herein for supply of the Goods and in particular a fresh warranty period shall apply. Such fresh warranty period shall expire on the date twelve (12) month from the date of such replacement and / or repair or on the expire date of the warranty for the original Goods which were replaced an/or repaired, whichever is later.

#### 19. TERMINATION FOR FAULT OF VENDOR

Should Vendor, at any time or from time to time :

- 19.1. Refuse or neglect to supply sufficient serviceable material in good and efficient operating condition to the satisfaction of Purchaser.
- 19.2 Refuse or neglect to supply sufficient material of proper quality for the due performance under the Purchase Order to the satisfaction of Purchaser.
- 19.3 Fail in any respect to supply material or any portion thereof in a proper, efficient, diligent and workmanlike manner and in accordance with Purchase Order to the satisfaction of Purchaser.
- 19.4 Fail to supply material or any part thereof with such speed as in the opinion of Purchaser is necessary to complete the same within the time or times specified in Purchase Order, or fail to comply with any of the terms of Purchase Order.

Then in any such event or event, each of which shall constitute an event of default, Purchaser may give written notice to Vendor to remedy such default within a period to be prescribed by Purchaser. If Vendor does not remedy such default within the prescribed period, the Purchaser shall have the right to cancel the Purchase Order and/or take material in partly finished or unfinished form, or any part thereof, out of the hands of Vendor.

If Vendor becomes insolvent or should a petition or bankruptcy be filed by or against Vendor, or should Vendor take the benefit of any bankruptcy or insolvency law, or file any complaint or arrangement thereunder, or if a receiver be appointed for Vendor or any of his property, then in any such event or events, each of which shall constitute an event of default, Purchaser shall have the right, after giving Vendor notice in writing thereof, to cancel Purchase Order and take the work, or any part thereof, out of the hands of Vendor.

Upon Purchaser canceling Purchase Order and taking the works, or any part thereof, out of the hands of Vendor, the following shall be the



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respective rights and duties of the Purchaser and Vendor :

- (a) Purchaser may place an order to another supplier to acquire the similar material, equipment and / or machinery which will meet the requirement of the Purchase Order.
- (b) If the Purchaser places an order to another supplier for any part thereof and such cost to complete the works is more than the difference between the price and the progress payments made thereon, then Vendor shall pay to the Purchaser, upon demand, the amount of such excess.

### 20. TERMINATION FOR CONVENIENCE

It is understood and agreed that the Purchaser may, at any time for reason, at its sole discretion, terminate the Purchase Order in whole or in part. In the event of such termination, Purchaser may, terminate the Purchase Order in whole or in part subject to 30 days prior written notice to Vendor. Vendor shall promptly or upon such other date as is specified in the notice discontinue all works being terminated and shall not execute instructions in a prompt and ordinary manner. Vendor shall preserve, protect, maintain and keep material or its part completed at the time of termination in good condition in accordance with Purchaser's instruction.

In the event of such termination, Vendor shall be entitled to the following :

- 20.1. A part of price incurred in accordance with Purchase Order date to the date of the termination of Purchase Order which has not been previously reimbursed and which has been incurred prior to the date of termination; and
- 20.2. All reasonable costs incurred by Vendor in bringing material to an orderly close and handing it over to the Purchaser.

The parties expressly agree to waive the applicability of Article 1266 and 1267 of the Indonesian Civil Code, which requires respectively, the Court's Interference to terminate this Purchase Order.

### 21. FORCE MAJEURE

Force Majeure referred to herein shall mean an occurrence beyond the Control and without the fault or negligence of the Party affected including, but not limited to, acts of God or the

public enemy, expropriation or confiscation; changes in law, war, rebellion, or riots; floods, unusually severe; weather that could not reasonably have been anticipated; fires, explosions, catastrophes, or other similar occurrence which are not within the control of the party affected. However, the following shall not be considered as Force Majeure.

- 1. Delay caused by lack or inability to obtain raw materials, congestion at the Vendor's works or elsewhere market shortages or similar occurrences, or
- 2. Delay, either on the part of the Vendor or its sub Vendors, caused by a shortage of supervisors or labor, inefficiency or similar occurrences, or
- 3. Sabotage, strikes, or any concerted acts of workmen which occur only in the works of the Vendor or its sub Vendors.
- 4. Inclement Weather

Should the Vendor be delayed or envisage delay in delivering of the Goods by an occurrence which the Vendor reasonably judges is Force Majeure and the Vendor cannot avoid or prevent said delay by any reasonable effort, the Vendor shall promptly notify the Purchaser of the occurrence and the Purchaser, if it agrees, shall then give notice to the Vendor confirming the existence of Force Majeure and shall authorize an unavoidable delay to the extent such delay is caused by Force Majeure.

No amendment to the Price, however shall be allowable because of Force Majeure occurrences.

Should the circumstances of Force Majeure continue over a period of three months, the Purchaser has the right, if no their understanding is reached to terminate the



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whole Purchase Order without further formality.

### 22. SUSPENSION OF WORK

#### 22.1 General Provisions

Purchaser, at any time, and from time to time and for any reason may suspend without cause all or part of the Goods by giving Vendor written notice specifying the part of the Goods to be suspended and the effective date of suspension and the estimate duration of suspension. Upon receiving any notice of suspension, Vendor shall, as soon as it is practicable to do so, and the Work has been made safe, promptly suspend further performance of the Suspended part of the Work accordingly, but shall continue to perform all unsuspended parts of the Goods. Vendor during such suspension period shall properly care for and all work in the progress in whatever states of completion, all equipment and materials, and all Purchaser property that is under Vendor control. Upon the request of Purchaser, Vendor shall promptly hand over to the Purchaser all such work in the progress, equipment and materials and Purchaser property.

Appropriate adjustment to the Project schedule and, if necessary, to the schedule and/or the Vendor Price to the extent permitted by Article 22.2 shall be made by the use of Change Orders provided that Vendor shall not be entitled to postponement of the schedule completion date and/or to any increase in the Purchase Order Price if such suspension was due to any cause attributable to Vendor.

Purchaser may at any time end a suspension by a notice to the Vendor specifying the effective date of termination of the Suspension. Vendor shall use its best efforts to resume performance of the Goods as soon as practically possible following receipt of such notice.

#### 22.2 Compensation

In the case of suspension under Article 22.1 for which Vendor is entitled to an increase in the Purchase Order Price, Purchaser shall compensate Vendor for:

- (a) Reasonable and documented actual costs of suspending the Goods and recommencing the suspended Goods; and
- (b) Making good any deterioration, defect or loss of the Goods that may have occurred during the suspension provided that such is not due to any defects in the Goods or Vendor's items or by any failure of Vendor to comply with Article 22.1,

But only the extent such expenditures are approved by Purchaser, by means of a Change Order, (such approval not to be unreasonably withheld) prior to Vendor incurring such costs.

#### 22.3 Prolong Suspension

After having given a suspension notice as provided under Article 22.1, Purchaser shall have the right to direct Vendor to resume its activities on all or some of the suspended Goods. If Vendor was instructed by Purchaser to demobilize and not to retain certain Vendor's personnel and/or Vendor's item on Purchaser account during the period of suspension, Purchaser shall give reasonable prior notice of remobilization(s) to Vendor. Upon resumption of the suspended Goods, Purchaser shall issue its confirmatory Change Order, if any, for the suspension. Such Change Order shall formalize all required adjustments, if any, to the schedule completion date and/or Purchase Order Price that result from the suspension of the Goods without cause pursuant to this Article 22. Any change to the Purchase Order Price shall be made in accordance with Article 22.2

#### 22.4 Constructive Cancellation

If the Goods or any part thereof is suspended pursuant to Article 22.1 on the instructions of Purchaser and an instruction to resume the suspended Goods is not received by Vendor within one hundred and eighty (180) days from the date of suspension then Vendor may give notice to Purchaser requesting permission, within thirty (30) days from the receipt thereof, to proceed with the suspended Goods. If such permission is not granted within that time Vendor may, but is not bound to, elect to treat the suspension as a constructive termination pursuant to Article 20 – Termination for Convenience, and Article 21 – Force Majeure of the affected Goods, whereupon the



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provisions of Article 20 – Termination for Convenience, and Article 21 – Force Majeure shall apply mutatis mutandis. For certainty, such election by Vendor shall cease to be available if not made before a notice to resume is made by Purchaser under Article 22.3 and shall not be available in the event of suspension due to the default of Vendor as provided in Article 22.5.

### 22.5 Suspend For Default

Purchaser shall also have the right, by giving notice in writing, to suspend the operations of Vendor in the even of default, gross negligence, or willful misconduct and/ or omission of Vendor in carrying out Vendor's material obligations under the Purchase Order. In such event, no compensation shall be payable by Purchaser to Vendor in respect of the part of the Goods so suspended and in respect of costs and expenses incurred as a result of such suspension. Suspension shall apply only to the part of the Goods specified in the notice and performance shall resume upon rectification of the default giving rise to the suspension. If Vendor still fails to remedy its obligation in respect of the part of the Goods so suspended, Purchaser shall be entitled to terminate the work under Clause 19.

### 23. PENALTY

If delivery or completion of work is delayed or hindered by any circumstances of force majeure nature, such as strikes, lock out, fire or accident or act of government or national calamity, all being causes beyond the Vendors reasonable control, a reasonable extension of time will be granted provided that written notification of such delay or hindrances is given immediately the same arises.

In case of delays not attributable to force majeure nor Purchaser, penalty will be claimed at the rate of 0.2 % of the Purchase Order value per day of delay subject to a maximum of 5% of total value of the order.

### 24. ASSIGNMENT

The Vendor shall not, without the Purchaser's prior written consent, directly or indirectly

assign, transfer of sub Vendor to any third party any order of the Purchaser or any benefit or obligation there under except as may be necessary in the normal course of business. In all circumstances the supplier remains personally responsible for the due fulfillment of the order.

### 25. ASSIGNMENT BY PURCHASER

The Purchaser reserves the right to assign this Purchase Order or any interest herein.

### 26. LANGUAGES & CORRESPONDENCE

Any and all correspondence, documents and execution of services hereunder, unless otherwise specifically designated, shall be in the English language in writing to the address as mentioned in the Inquiry / Purchase Order.

### 27. COMPLIANCE WITH LAW

The Vendor shall comply and secure compliance by its Sub Vendors, with all applicable laws or regulation in connection with the Goods and services to be performed hereunder. If the Vendor discovers any variance between the provisions of applicable laws and regulations and the drawings, specifications and other technical data furnished by the Purchaser the Vendor shall promptly notify the Purchaser in writing thereof and obtain necessary changes from the Purchaser before proceeding with the part of the services affected thereof.

### 28. NON-WAIVER

Any provision of the Purchase Order shall not be considered to be waived by the Purchaser unless such notice of waiver is given in writing by the Purchaser.

Even if such notice has been given, such waiver shall not be constructed as being a waiver of any past or future rights of the Purchaser under the provision of the Purchase Order, unless otherwise expressly stipulated therein. Failure of the Purchaser insist upon strict performance of any of the terms and conditions hereof, or failure or delay of the Purchaser to exercise any acts, rights, or remedies provided herein or by law shall not



relieve the Vendor of liability under any guarantees or of obligations under the Purchase Order and shall not be deemed a waiver of any right of the Purchaser to insist strict fulfillment of the Purchase Order or of any of the Purchaser's right or remedies as to the Goods.

**29. ENTIRE AGREEMENT**

The Purchase Order these Commercial terms for Purchasing the Requisition and / or Specification shipping and packing instruction and other applicable documents specified in the Purchase Order together with their attachments and references constitute with the entire agreement between the Purchaser and the Vendor and may only be modified in writing by the authorized representatives of the parties hereto.

There is no other agreement between the Purchaser and the Vendor whether oral or written than those herein contained, and the Purchase Order supersedes any and all previous oral or written representations, inducement or understandings.

**30. LIENS, CLAIMS AND ENCUMBRANCES**

30.1. Vendor shall obtain release of liens, claims, and all other encumbrance in form and substance acceptable to Purchaser, executed by it and all its Vendor and others persons or entities who by reasons of furnishing materials, equipment, labor or other services under this Purchase Order are or might be actual or potential lien holders, claimants or the beneficiaries of any other encumbrances. Purchaser may withhold all amount owed to vendor unless and until Vendor provides such release to Purchaser.

30.2. Vendor shall furnish Purchaser all its policies and procedures for completing the equipments free of all claims liens and encumbrances. Vendor shall defend, indemnify and hold harmless each member of Purchaser's and Company's group against any and all liabilities, damage, losses, costs, and expenses arising out of or in connection with all claims,

liens, and encumbrances filed made or otherwise existing in connection with the works, including attorneys' fees and all other expenses incurred in discharging any such claims liens and encumbrances.

30.3. If Vendor fails to discharge or otherwise cause the release of any claim, lien or encumbrance against the equipments, by Vendor or its sub Vendor, Purchaser shall promptly notify Vendor in writing of such failure. If Vendor does not or cannot furnish Purchaser in writing reasons for not discharging or causing the release of such claim, lien, or encumbrance that are satisfactory to Purchaser, Purchaser shall have the right but not obligation, at its option, after written notification to Vendor, to settle by agreement or otherwise provide for such discharge; and Vendor shall reimburse Purchaser all costs incurred by Purchaser and/or

30.4. Company in causing the release or discharging such lien, claim, or encumbrance, including administrative costs, attorneys' fees and other expenses. Vendor shall submit written notice to Purchaser of any and all claims, demands or proceedings by Vendor against Company, Purchaser or their affiliates arising out of or related to purchaser's performance of its obligations under this Purchase Order. Such notice must be given to Purchaser clearly marked with caption "Notice of Claim" on every page of the document within fourteen (14) days after the notice of or reasonably should have been expected to have had notice of the basis for such claims, demands or proceeding and, with regards to claims, demands and proceedings arising after completion of the equipment within 30 days of the completion of the equipment. Any statutes of limitations not withstanding, Vendor expressly agrees that its right to bring or to assert against Company, Purchaser or their affiliates any and all of such



claims, demands, or proceeding shall be waived unless (A) Timely notice as set forth above is given to Purchaser in accordance with the provisions of article and (B) Legal proceeding, if any, based only such claims or demands are commenced within one (1) year of the date of such notice to Purchaser.

- 30.5. Vendor shall cause provisions similar to article 30.4 to be included in all its sub Purchase Orders/Purchase Orders. In the event that any claim, demand or proceeding is made or commenced against Purchaser, Company, or their affiliates form and against any and all liabilities, damages and costs, including without limitation all in-house costs, third party costs, administrative costs, attorneys' fees and other expenses, associated with or related to such Vendor claim, demand or proceeding, and such damages or costs shall not be reimbursable by Purchaser.
- 30.6. In the event Vendor pursues any claim, demands or proceedings against Purchaser, Company, or their affiliates to litigation and is not awarded the total amount of damages claimed, then Vendor shall pay Purchaser or at Purchaser's discretion, Purchaser shall deduct from amount owed Vendor, all costs incurred by Purchaser including without limitation, all in-house cost, third party cost, administrative costs, attorneys fees and court costs relating to the review, investigation and defense of any such claims, demands or proceedings that are incurred by Purchaser, Company or their affiliates.
- 30.7. Vendor shall make no claim for damages for delay, whether contemplated or not, in the performance of this Purchase Order occasioned by any act or omission to act of any member of the Purchaser's and Company's group, and Vendor agrees that in lieu of any such claim Vendor shall be fully compensated by an extension of time to complete

performance of the work as provided herein.

### 31. VENDOR'S REPRESENTATIVE

The Vendor shall designate one representative to act on behalf of the Vendor. Such representative shall have the requisite knowledge to discuss and powers to decide any matters as required by the Purchaser at any time until commissioning is accepted by the Company.

### 32. GOVERNING LAW

The validity and interpretation of this Inquiry, the Purchase Order and legal relations of the parties concerned shall be governed by the Laws of the Republic of Indonesia.

### 33. ARBITRATION

Any dispute arising out of or in connection with this agreement, which cannot be settled by the parties hereto themselves, shall be finally resolved by arbitration in accordance with the arbitration rules of Badan Arbitrase Nasional Indonesia.

### 34. AGENT

If the Vendor is acting as an agent, the rights of the Purchaser against the Vendor and the Vendor's obligations to the Purchaser shall be constructed as if they are rights against obligations of the principal on whose behalf the Vendor is acting as one agent.

### 35. PERFORMANCE BOND

As a guarantee for the due and proper fulfillment of the Purchase Order, Vendor shall provide a performance security in form of a bank guarantee as per Tripatra format for 5 % of the total value of Purchase Order.

The Performance Bond value provided by vendor shall always be for 5% of the Purchase Order value.



## PT. TRIPATRA

ENGINEERS AND CONSTRUCTORS

Such performance security shall be submitted within 15 days from the date of the Purchase Order.

The performance security shall remain valid and in full effect till the warranty period as specified in the Purchase Order.

The performance security shall ensure payment full or partial of any obligations, damages, penalties or expenses for which Vendor may become liable to Purchaser.

The format of the Performance Bond and Advance Bank Guarantee shall follow as per PT. Tripatra format enclosed. Vendor shall follow list of banks given and approved by TPEC.

### 36. PAYMENT

Payment will be made by Telegraphic Transfer within 30 days after receipt of Invoice, Faktur Pajak (for Indonesian Vendors only), and other Documentation as required by the Purchase Order / In specific cases where advance payment is required for long lead equipment and materials, advance payment may be considered on Vendor providing a Bank Guarantee Bond for the value of the advance payment requested valid till the delivery period.

### 37. CONSEQUENTIAL DAMAGES

Neither Party shall be liable to each other for any indirect, special or consequential damage which shall include loss of profit, loss of production, loss of product, loss of business, except those arising out of willful misconduct or gross negligence.

**ATTACHMENT-2 PO NO. 9714-STA-3210003571  
SPECIAL TERMS AND CONDITIONS OF PURCHASING**



## SPECIAL TERMS AND CONDITIONS OF PURCHASING

This section contains provisions which are specific to each Purchase Order and which modify the General Terms and Conditions of Purchasing. Whenever there is a conflict, the provisions herein shall prevail over those in the General Terms and Conditions of Purchasing.

### 1. REFERENCE

- Vendor Name : TRIMITRA WISESA ABADI, PT.
- Quotation No. : 24-4/T-COM/III/18 REV.7      DATE : MARCH 16, 2018

### 2. SPECIFICATION

#### 2.1 MATERIAL REQUISITION SHEET

MRS NO.	REV	TITLE
9714-T000-139910B-MRS-006A	0	MRS FOR WATER TREATMENT PACKAGE AND WASTE WATER TREATMENT PACKAGE

### 3. TERMS OF PAYMENT

Payment shall be made by T/T within 30 (thirty) days from the date of receipt of documents as per Attachment 4 (Procedure for Invoicing/Payment, Doc. No. FC2-BP-003) and based on the following milestones:

1. 15% Down Payment against Advance Payment Bond  
(Supporting documents refer to Attachment 4 Procedure for Invoicing/Payment Point 4.A.)
2. 40% Before Material Delivery.  
(Supporting documents refer to Attachment 4 Procedure for Invoicing/Payment Point 4.E.)
4. 35% after equipment arrived at Site.  
(Supporting documents refer to Attachment 4 Procedure for Invoicing/Payment Point 4.F.)
5. 10% after MDR submission.  
(Supporting documents refer to Attachment 4 Procedure for Invoicing/Payment Point 4.H.)

### 4. DELIVERY SCHEDULE

- Delivery Date : 10-09-2018
- Delivery Point : FRANCO TRIMITRA WISESA ABADI WORKSHOP, BANTEN

### 5. PERFORMANCE BOND

PERFORMANCE BOND IS NOT APPLICABLE

### 6. OTHER TERMS AND CONDITIONS

#### 1. CORRESPONDENCE AND INVOICING

##### A. CORRESPONDENCE

All correspondence regarding this Purchase Order shall bear the Purchase Order number, and sufficient other information to assure quick and easy reference, and shall be addressed to:

PT. TRIPATRA ENGINEERS AND CONSTRUCTORS  
INDY BINTARO OFFICE PARK, GEDUNG A  
JL. BOULEVARD BINTARO JAYA BLOK B7/A6 SEKTOR VII  
CBD BINTARO JAYA, KEL. PONDOK JAYA - KEC. PONDOK AREN  
KOTA TANGERANG SELATAN 15224

ATTN : Ahmad Hamid Zacky Shebubakar  
COPY : Manvendra M. Bhadange  
PHONE : (+62-21) 297-70700 ; FAX : (+62-21) 297-70701

B. INVOICING

Original Invoice, copy of Packing List, and other documents shall be sent to:

PT. TRIPATRA ENGINEERS AND CONSTRUCTORS  
INDY BINTARO OFFICE PARK, GEDUNG A  
JL. BOULEVARD BINTARO JAYA BLOK B7/A6 SEKTOR VII  
CBD BINTARO JAYA, KEL. PONDOK JAYA - KEC. PONDOK AREN  
KOTA TANGERANG SELATAN 15224  
ATTN : Mr. Hara Siregar  
PHONE : (+62-21) 297-70700 ; FAX : (+62-21) 297-70701

C. LANGUAGE

Any and all correspondences documents and execution of services, hereunder, unless otherwise specifically designated, shall be in the English language in writing to the address as mentioned in 5.1 above.

2. SHIPPING MARKS

All shipments shall bear the following marking clearly made with indelible ink on each package prominently in two or three places:

PT. PERUSAHAAN LISTRIK NEGARA (PERSERO)  
MOBILE POWER PLANT NIAS (25 MW)

CASE NO. :  
GROSS WEIGHT : KGS  
MEASUREMENT : M3  
PORT OF DESTINATION :

DESCRIPTION :  
TPEC JOB NO. : 9714  
PO. NO : 9714-STA-3210003571



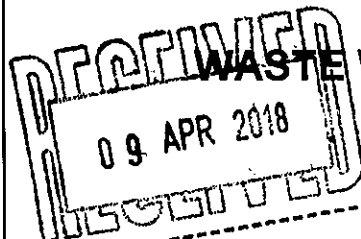
In addition Vendor shall mark each package as required in the specification.

3. OTHERS

\* VENDOR : PT. TRIMITRA WISESA ABADI  
\* CLIENT : PT. PERUSAHAAN LISTRIK NEGARA (PERSERO)  
\* PURCHASER : PT. TRIPATRA ENGINEERS AND CONSTRUCTORS

ACCEPTED BY :  
TITLE :  
DATE :

**ATTACHMENT-3 PO NO. 9714-STA-3210003571**  
**MATERIAL REQUISITION SHEET**

		PT. PERUSAHAAN LISTRIK NEGARA (PERSERO) MOBILE POWER PLANT NIAS (25 MW) CONTRACT NO. : 0372.PJ/DAN.02.01/DIR/2017						REV. 1	
		PT. PLN (PERSERO) PUSAT ENJINIRING KETENAGALISTRIKAN						SHEET 1 of 14	
PLN DOC NO.									
		CONSORTIUM OF PT. TRIPATRA ENGINEERS AND CONSTRUCTORS – PT. PRASTIWAHYU TRIMITRA ENGINEERING							
DOC. NO.		9714-T000-139910B-MRS-006A							
DISCIPLINE		MECHANICAL							
<b>MATERIAL REQUISITION SHEET FOR WATER TREATMENT PACKAGE AND WASTE WATER TREATMENT PACKAGE (NON IMPORT)</b>									
									
MOBILE POWER PLANT NIAS (25 MW)					R E V I E W	CIVIL			
CONTRACTOR DOCUMENT REVIEW						MECH			
LOG IN	DATE					ELECT			
	COMM NO.					I & C			
A	<input type="checkbox"/> APPROVED					SUPPORT			
B	<input type="checkbox"/> APPROVED AS NOTE				D I S T R I B U T I O N	CONTRACTOR			
C	<input type="checkbox"/> NOT APPROVE					RECORD			
I	<input type="checkbox"/> INFORMATION					WORKING DOCUMENT			
APPROVAL DOES NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ERROR OR DEVIATIONS FROM CONTRACT REQUIREMENTS									
BY: _____ DATE: _____									
LOG IN	DATE :								
	COMM NO. :								
1	Apr 5, 2018	Re-Issued for Purchase	FAS	NIC	DPR	DAV			
0	Mar 21, 2018	Issued for Purchase	FAS	NIC	DPR	DAV			
REV.	DATE	ISSUE DESCRIPTION	PREP'D	CHK'D	REVIEW	APP'D			

## Change Log

REV.	SECTION	CHANGE DESCRIPTION
0	ALL	Issued for Purchase
1	ALL	Re-Issued for Purchase

## Document Holds

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	<b>MOBILE POWER PLANT NIAS (25 MW)</b>	<b>Doc. No.</b> <b>9714-T000-139910B-MRS-006A</b>	
	<b>MATERIAL REQUISITION SHEET</b> <b>WATER TREATMENT PACKAGE AND WASTE WATER TREATMENT PACKAGE</b>	<b>Rev. 1</b>	<b>5-Apr-2018</b>


1. Project Name	: MOBILE POWER PLANT NIAS (25 MW)
2. Project Number	: 9714
3. Client	: PLN (PERSERO), PT
4. Requisition Number	: 9714-T000-139910C-RFQ-006
5. Quotation Evaluated	: WATER TREATMENT PACKAGE AND WASTE WATER TREATMENT PACKAGE


  


No	Tag Number	Service	Quantity
1	GCK 10 AK 01	Water Treatment Package	1 package
2	GCK 11 AK 01	Waste Water Treatment Package	1 package
<b>Total Equipment</b>			<b>2 packages</b>

			MOBILE POWER PLANT NIAS (25 MW)		Doc. No. 9714-T000-139910B-MRS-006A	
			MATERIAL REQUISITION SHEET WATER TREATMENT PACKAGE AND WASTE WATER TREATMENT PACKAGE COMMON REQUIREMENT		Rev. 1	5-Apr-2018
NO.	PARAMETER	UNIT	REQUIREMENT	NOTES		
1.	<b>GENERAL</b>					
	Manufacturer Name		Trimitra Wisesa Abadi, PT			
	Country of Origin - Packager		Indonesia			
	Country of Origin - Main Materials		Open COO			
	Quotation No./ Rev./ Date		15 Nov 17: 20-11/T-TEC/XI/17 5-Feb-18: 20-11/T-TEC/XI/17-R1 7-Feb-18: 20-11/T-TEC/XI/17-R2 31-Jan-18: TC #1 response 5-Feb-18: TC #2 response			
	Technical Clarification History		4 months			
	Delivery time		Franco, Jakarta			
	Delivery term					
2.	<b>APPLICABLE DOCUMENT</b>					
	9714-T000-1399104-DTS-032 Datasheet for WTP		Confirmed			
	9714-W000-1399204-DTS-033 Datasheet for WWTP		Confirmed			
	9714-T000-1399103-SPC-003 Specification for Water Treatment Package		Confirmed			
3.	<b>SCOPE OF SUPPLY (MATERIALS)</b>					
3.1	<b>Equipment Proper of the following tagged items:</b>					
	<b>Water Treatment Package</b>					
	GBB 01 AK 01 - Pre Treatment Unit					
	1) GAF 02 AT 01/02 - Multi Media Filter 01/02		Included			
	2) GAF 03 AT 03 - Carbon Filter		Not necessary Carbon active agent/ element is placed in MMF			
	3) GAF 01 AP 03 - Backwash Pump		Included			
	<b>GCK 05 AK 01 - RO Unit</b>					
	1) GCX 01 AP 01/02 - RO Feed Pump 01/02		Included			
	2) GAF 04 AT 04 - Micro Filter		Included			
	3) GCK 01 AP 01/02 - RO Feed Booster Pump 01/02		Included			
	4) GCB 02 AT 01/02 - RO Membrane 01/02		Included			
	5) GCK 02 BB 01 - Fresh Water Tank		Included			
	6) GCH 01 AP 01/02 - Service Water Transfer Pump 01/02		Included			
	7) GCX 01 AP 01/02 - Generation Water Transfer Pump 01/02		Included			
	8) Chemical Injection Unit		Included			
	9) Chemical Cleaning Unit		Included			
	10) GCB 01 AT 01 - Ultra Filter		Not required			
	<b>Waste Water Treatment Package</b>					
	1) GUB 01 BB 01 - Oil Water Separator		Included			
	2) GUB 02 BB 01 - Neutralization Pond		Confirmed			
	3) Chemical Dosing Unit		Included			
3.2	<b>Each package shall include the following on skid components as indicated in PID</b>		As per battery limit in PID			
	<b>Electrical &amp; Instrumentation</b>					
	Local Control Panel - PLC System		WTP: PLC and HMI WWTP: Semi automatic			
	Motor starter		Included During detail engineering MCC panel Common with PLC panel As per instrument list			
	Gauge & Transmitter		Included			
	Control Valve		Included			
	Shut Off Valve		Included			
	Tubing		Included			
	Wiring, Cable and Tray		Included			
	Junction Box		Included			
	Others as required for proper operation performance		During detail engineering			
	<b>Mechanical, Piping &amp; Structural</b>					
	Piping		Included			
	Valve		Included			
	Strainer		Not required			
	PSV		Included			
	Earthing lug		Included			
	Lifting lug		Included			
	Frame skid		Included			
	Drip pan		During detail engineering			
	Anchor bolt		Included			
	Platform & Ladder		Included			
	Name plate		Included			



			MOBILE POWER PLANT NIAS (25 MW)		Doc. No. 9714-T000-139910B-MRS-006A	
			MATERIAL REQUISITION SHEET WATER TREATMENT PACKAGE AND WASTE WATER TREATMENT PACKAGE COMMON REQUIREMENT		Rev. 1	5-Apr-2018
NO.	PARAMETER	UNIT	REQUIREMENT		NOTES	
	Others as required for proper operation performance		During detail engineering			
3.3	<b>Spares, Tools and Consumables</b>					
	Spare parts for construction and commissioning		Included			
	Recommended spare parts for two years continuous operation		Optional			
	Consumables for construction and commissioning		Included			
	Special tools		Not required			
			During detail engineering			
4	<b>SCOPE OF WORK (SERVICES)</b>					
	<b>Engineering</b>					
	Process design (simulation, selection and sizing)		Included			
	Mechanical Strength Calculation		Included			
	Anchor bolt sizing calculation		Included			
	Loading Data for Foundation Design		Included			
	Drawings preparation :					
	• General Arrangement Drawing		Included			
	• Detail Drawing		Included			
	• Shop Drawing		Included			
	Documents Preparation :					
	• Project Management Documents		Included			
	• Engineering Documents		Included			
	• Fabrication Documents		Included			
	• QC and Inspection Documents		Included			
	• HSE Documents		Included			
	Documents for Certification		Included			
	Final Documentation (MDR)		Included			
	<b>Fabrication/ Manufacturing</b>					
	Shop Fabrication Work		Included			
	Welding as per WPS/PQR		During detail engineering			
	External/ Internal Painting/ Coating					
	• Surface Preparation		Included			
	• Painting/ Coating application		Included			
	<b>Transportation/ Supply Chain</b>					
	Packing, marking and preservation		Included			
	Special requirement on transportation & storage, if any		Included			
	Corrosion protection during transportation, storage, construction		Included			
	<b>Installation and Assembling</b>					
	Site Installation and assembling		Excluded			
	<b>Others</b>					
	Site assistance (supervision/ training)		30 days Included			
6	<b>INSPECTION AND TESTING</b>					
	Compliance of Inspection & steps as per approved ITP		During detail engineering			
	Inspection and Test at Shop :					
	• Material Certificate Review		Certificate from manufacturer			
	• Visual and Dimensional Check		During detail engineering			
	• Welding and NDE		During detail engineering			
	• Coordination with client and/or other third party inspection agency		During detail engineering			
	Factory Acceptance Test					
	• Static equipment: pressure test		During detail engineering			
	• Rotating equipment: performance test		During detail engineering			
	• E&I equipment: function test		During detail engineering			
	Welding Qualification :		During detail engineering			
	Inspection of Welding :		During detail engineering			
	Non Destructive Examination :		During detail engineering			
	Pickling and pasivation for SS surface		During detail engineering			
	Painting & Coating Inspection :		During detail engineering			
	Site Acceptance Test (Precommissioning)					
	• Package performance test (mechanical run & control intergration)		30 days Included			
	Certification		During detail engineering			
8	<b>GUARANTEE AND WARRANTY</b>					
	Process and performance guarantee		Included			
	Materials guarantee		18 months from hand over, or 12 months from start up			
	Mechanical and Construction Warranty		18 months from hand over, or 12 months from start up			


			MOBILE POWER PLANT NIAS (25 MW)		Doc. No. 9714-T000-139910B-MRS-006A	
			MATERIAL REQUISITION SHEET WATER TREATMENT PACKAGE		Rev. 1	5-Apr-2018
NO.	PARAMETER	UNIT	REQUIREMENT		NOTES	
1	<b>GENERAL</b>					
	Equipment name		Water Treatment Package			
	Quantity	ea	1 package			
	Importance note		During technical clarification, it is freezed for the statement that equipments listed here are indicative only and subject to Vendor's advice. Vendor may add, delete, or modify equipments as necessary to meet the final water product specification.			
2	<b>DESIGN DATA</b>					
	General					
	Design Life		25 years			
	Local certification		Included if required During detail engineering			
	Environment Condition					
	Location (Onshore/ Offshore) (Indoor/ Outdoor)		Onshore/ Outdoor			
	Ambient air temperature (Min/ Avg/ Max)	°C	18 / 26 / 31			
	Site wind velocity / Design wind velocity	m/s	11.3 / 38			
	Relative humidity (Min/ Avg/ Max)	%	88 / 89 / 91			
	Elevation	m	7.15 MLLWL			
	Available Utility Requirement					
	Instrumentation and Control		230 VAC / 1 phase / 50 Hz			
	Motor < 150 kW		400 VAC / 3 phase / 50 Hz			
	Instrument air utility	barg	Max 8.6			
2.1	<b>GBB 01-AK-01 - Pre-Treatment Unit</b>					
	Quantity	ea	1 set			
	Size	mm	2500 W x 5000 L			
	Package schematic (Skid or Container)		On-Container			
	Inlet water analysis - raw water		As stated in datasheet			
	Outlet water specification - pretreated water		During detail engineering			
	Empty Weight	kg	3650			
	Operating Weight	kg	30800			
2.1.1	<b>1) GAF 02 AT 01/02 - Multi Media Filter 01/02</b>					
	Process					
	Quantity arrangement	ea	2 x 100%			
	Type		Automatic Pressure Filter Combine with carbon active Purpose: reduce turbidity c/w Man Hole, Hand Hole & Safety valve			
	Size	mm	750 ID x 1800 H			
	Service fluid		Water			
	Flow Rate (In/ Out)	m3/hr	5 (upstream pump rating: 10) / Vendor to advise During detail engineering			
	Pressure					
	Design - Internal / External	barg	7			
	Operating - Inlet / Outlet	barg	3-5			
	Temperature					
	Design - Min / Max	°C	During detail engineering			
	Operating - Inlet / Outlet	°C	Ambient			
	Filter media - type/ material		Gravel & Silica Sand & Carbon active			
	Qty of filter element	ea	During detail engineering			
	Max particle size	µm	During detail engineering			
	Pressure drop (operating/ allowable)	bar	0.3-0.7			
	Filtration efficiency	%	Up to 90 %			
	Cycle time - minimum	hr	During detail engineering			
	Availability factor - minimum	%	During detail engineering			
	Achievable turndown	%	During detail engineering			
	Mechanical					
	Design Code		ASME VIII Div.1/ Manufacturer Standard			
	Code Stamp		During detail engineering			
	Manufacturer		No			
	Thickness	mm	During detail engineering			
	Corrosion allowance	mm	During detail engineering			
	Material - main parts		CS			
	Flange type and rating		During detail engineering			
	Gasket		During detail engineering			
	Anchor/ Setting bolt		A 325 / A307 (HDG)			
	Empty Weight	kg	500			
	Test Weight	kg	During detail engineering			
	Inspection & Test					
	Non Destructive Testing		During detail engineering			
	FAT - pressure test		During detail engineering			
	Painting					
	Surface preparation and painting		During detail engineering			
2.1.2	<b>2) GAF 03 AT 03 - Carbon Filter</b>		Not necessary Carbon active agent/ element is placed in MMF			
2.1.3	<b>3) GAF 01 AP 03 - Backwash Pump</b>					
	Process					
	Backwash mode		Auto			
	Quantity arrangement	ea	<30 minutes 2 x 100%			

			MOBILE POWER PLANT NIAS (25 MW)		Doc. No. 9714-T000-139910B-MRS-006A	
			MATERIAL REQUISITION SHEET WATER TREATMENT PACKAGE		Rev. 1	5-Apr-2018
NO.	PARAMETER	UNIT	REQUIREMENT		NOTES	
	Type		Centrifugal			
	Flow (Normal/ Rated)	m <sup>3</sup> /h	10			
	Service fluid		Water			
	Viscosity	cP	0.89			
	Specific gravity		During detail engineering			
	Vapor pressure	bar	1			
	Temperature		During detail engineering			
	Design - Min / Max	°C	During detail engineering			
	Operating	°C	During detail engineering			
	Suction pressure (Max/ Rated)	bar g	During detail engineering			
	Discharge pressure (Max/ Rated)	bar g	During detail engineering			
	Head	m	35			
	NPSH a	m	During detail engineering			
	NPSH r	m	During detail engineering			
	Rated power	kW	2.2			
	Mechanical		During detail engineering			
	Design Code		Manufacturer standard			
	Code Stamp		During detail engineering			
	Manufacturer		Not applicable			
	Material - Casing		During detail engineering			
	Material - Impeller		Cast Iron & SS 304			
	Flange type and rating		SS 304			
	Gasket		inside: FF or RF / 150#			
	Anchor/ Setting bolt		tie in: RF / 150#			
	Empty Weight	kg	During detail engineering			
	Inspection & Test		Vendor to advise			
	FAT		A 325 / A307 (HDG)			
	Painting		60			
	Surface preparation and painting		During detail engineering			
2.2	GCK-05-AK-01 - RO Unit					
	Quantity	ea	1 set			
	Size	mm	2000 W x 5000 L			
	Package schematic (Skid or Container)		During detail engineering			
	Inlet water analysis - pre treated water		On-Container			
	Outlet water specification		Outlet of pre-treatment system			
	Empty Weight	kg	During detail engineering			
	Operating Weight	kg	580			
2.2.1	1) GCX 01 AP 01/02 - RO Feed Pump 01/02		During detail engineering			
	Process		1540			
	Working mode		During detail engineering			
	Quantity arrangement	ea	2 x 100%			
	Type		Centrifugal			
	Flow (Normal/ Rated)	m <sup>3</sup> /h	3.5			
	Service fluid		During detail engineering			
	Viscosity	cP	Water			
	Specific gravity		0.89			
	Vapor pressure	bar	During detail engineering			
	Temperature		1			
	Design - Min / Max	°C	During detail engineering			
	Operating	°C	During detail engineering			
	Suction pressure (Max/ Rated)	bar g	During detail engineering			
	Discharge pressure (Max/ Rated)	bar g	During detail engineering			
	Head	m	differential pressure 3 bar			
	NPSH a	m	100 m			
	NPSH r	m	supply 30 m			
	Rated power	kW	During detail engineering			
	Mechanical		0.75			
	Design Code		Manufacturer standard			
	Code Stamp		During detail engineering			
	Manufacturer		Not applicable			
	Material - Casing		During detail engineering			
	Material - Impeller		Cast Iron & SS 304			
	Flange type and rating		SS 304			
			inside: FF or RF / 150#			
			tie in: RF / 150#			
			During detail engineering			

			MOBILE POWER PLANT NIAS (25 MW)		Doc. No. 9714-T000-139910B-MRS-006A	
			MATERIAL REQUISITION SHEET WATER TREATMENT PACKAGE		Rev. 1	5-Apr-2018
NO.	PARAMETER	UNIT	REQUIREMENT		NOTES	
	Gasket		During detail engineering			
	Anchor/ Setting bolt		A 325 / A307 (HDG)			
	Empty Weight	kg	30			
	Inspection & Test		During detail engineering			
	FAT		During detail engineering			
	Painting		During detail engineering			
	Surface preparation and painting		During detail engineering			
2.2.2	2) GAF 04 AT 04 - Micro Filter					
	Process					
	Quantity arrangement	ea	2			
	Type		Cartridge Filter			
	Size	mm	250 ID x 500 H			
	Service fluid		Water			
	Flow Rate (In/ Out)	m3/hr	100 LPM			
			6 m3/hr			
	Pressure					
	Design - Internal / External	barg	8			
	Operating - Inlet / Outlet	barg	5			
	Temperature					
	Design - Min / Max	°C	During detail engineering			
	Operating - Inlet / Outlet	°C	Ambient			
	Filter media - type/ material		Cartridge/ Polypropylene			
	Qty of filter element	ea	During detail engineering			
	Max particle size	µm	5			
	Pressure drop (operating/ allowable)	bar	1			
	Filtration efficiency	%	Up to 90 %			
	Cycle time - minimum	hr	During detail engineering			
	Availability factor - minimum	%	During detail engineering			
	Achievable turndown	%	During detail engineering			
	Mechanical					
	Design Code		Manufacturer standard			
	Code Stamp		During detail engineering			
	Manufacturer		No			
	Thickness	mm	During detail engineering			
	Corrosion allowance	mm	During detail engineering			
	Material - main parts		SUS 304			
	Flange type and rating		inside: FF or RF / 150#			
			tie in: RF / 150#			
	Gasket		During detail engineering			
	Anchor/ Setting bolt		A 325 / A307 (HDG)			
	Empty Weight	kg	30			
	Test Weight	kg	50			
	Inspection & Test		During detail engineering			
	Non Destructive Testing		During detail engineering			
	FAT - pressure test		During detail engineering			
	Painting		During detail engineering			
	Surface preparation and painting		During detail engineering			
2.2.3	3) GCB 01 AT 01 - Ultra Filter		Not necessary.			
2.2.4	4) GCK 01 AP 01/02 - RO Feed Booster Pump 01/02					
	Process					
	Working mode		During detail engineering			
	Quantity arrangement	ea	2 X 100%			
	Type		Centrifugal			
	Flow (Normal/ Rated)	m3/h	3.5			
	Service fluid		Water			
	Viscosity	cP	0.89			
	Specific gravity		1			
	Vapor pressure	bar	During detail engineering			
	Temperature					
	Design - Min / Max	°C	During detail engineering			
	Operating	°C	During detail engineering			
	Suction pressure (Max/ Rated)	barg	During detail engineering			
	Discharge pressure (Max/ Rated)	barg	During detail engineering			
	Head	m	Differential head: 27.5 bar (Vendor to advise)			
			280 m			
			Supply 150 m			
	NPSH a	m	During detail engineering			
	NPSH r	m	During detail engineering			
	Rated power	kW	4			
	Mechanical					
	Design Code		Manufacturer standard			
	Code Stamp		During detail engineering			
	Manufacturer		No			
	Material - Casing		Cast Iron & SS 316			
	Material - Impeller		SS 316			
	Flange type and rating		inside: FF or RF / 150#			
			tie in: RF / 150#			
	Gasket		During detail engineering			


			MOBILE POWER PLANT NIAS (25 MW)		Doc. No. 9714-T000-139910B-MRS-006A	
			MATERIAL REQUISITION SHEET WATER TREATMENT PACKAGE		Rev. 1	5-Apr-2018
NO.	PARAMETER	UNIT	REQUIREMENT		NOTES	
	Anchor/ Setting bolt		A 325 / A307 (HDG)			
	Empty Weight	kg	60			
	Inspection & Test		During detail engineering			
	FAT		During detail engineering			
	Painting		During detail engineering			
	Surface preparation and painting		During detail engineering			
2.2.5	5) GCB 02 AT 01/02 - Reverse Osmosis Membrane Process					
	Quantity arrangement	ea	2 X 100% < 30 minutes Auto			
	Type		Thin Film Composite			
	Size	mm	4" X 40" 4 X 4 pcs 4000 mm X 400 mm X 1500 mm			
	Service fluid		Water			
	Flow Rate (In/ Out)	m3/hr	Permeate flow: 2			
	Pressure		During detail engineering			
	Design - Internal / External	barg	Max 40			
	Operating - Inlet / Outlet	barg				
	Temperature		During detail engineering			
	Design - Min / Max	°C	Max 45			
	Operating - Inlet / Outlet	°C				
	Filter media - type/ material		Membrane: Polyamid (PA) Housing: FRP			
	Qty of filter element	ea	4 X 4 pcs			
	Max particle size	µm	During detail engineering			
	Pressure drop (operating/ allowable)	bar	During detail engineering			
	Filtration efficiency	%	1 bar/ element			
	Cycle time - minimum	hr	Recovery rate: 60			
	Availability factor - minimum	%	During detail engineering			
	Achievable turndown	%	During detail engineering			
	Mechanical					
	Design Code		Manufacturer standard			
	Code Stamp		During detail engineering			
	Manufacturer		No			
	Thickness	mm	During detail engineering			
	Corrosion allowance	mm	During detail engineering			
	Material - main parts		Membrane: Polyamid (PA) Housing: FRP			
	Flange type and rating		inside: FF or RF / 150# tie in: RF / 150#			
	Gasket		During detail engineering			
	Anchor/ Setting bolt		During detail engineering			
	Empty Weight	kg	A 325 / A307 (HDG)			
	Test Weight	kg	150			
	Inspection & Test		During detail engineering			
	Non Destructive Testing		300			
	FAT - pressure test		During detail engineering			
	Painting		During detail engineering			
	Surface preparation and painting		Manufacturer standard			
			During detail engineering			
2.2.6	6) GCK 02 BB 01 - Fresh Water Tank					
	Process					
	Quantity arrangement	ea	2			
	Type		Cylindrical Tank			
	Size	mm	2140 Dia x 2450 H			
	Service fluid		Water			
	Capacity	m3	8			
	Pressure					
	Design - Internal / External	barg	Full of water			
	Operating - Inlet / Outlet	barg	Atm			
	Temperature					
	Design - Min / Max	°C	During detail engineering			
	Operating - Inlet / Outlet	°C	Ambient			
	Mechanical					
	Design Code		Manufacturer standard			
	Code Stamp		During detail engineering			
	Manufacturer		No			
	Thickness	mm	During detail engineering			
	Corrosion allowance	mm	During detail engineering			
	Material - main parts		Polyethylene			
	Flange type and rating		inside: FF or RF / 150# tie in: RF / 150#			
	Gasket		During detail engineering			
	Anchor/ Setting bolt		During detail engineering			
	Empty Weight	kg	A 325 / A307 (HDG)			
	Test Weight	kg	500			
	Inspection & Test		During detail engineering			
	Non Destructive Testing		During detail engineering			
	FAT - pressure test		During detail engineering			

			MOBILE POWER PLANT NIAS (25 MW)		Doc. No. 9714-T000-139910B-MRS-006A	
			MATERIAL REQUISITION SHEET WATER TREATMENT PACKAGE		Rev. 1	5-Apr-2018
NO.	PARAMETER	UNIT	REQUIREMENT		NOTES	
	Painting		Manufacturer standard			
	Surface preparation and painting		During detail engineering			
2.2.7	7) GCX 01 AP 01/02 - Service Water Distribution Pump 01/02					
	Process					
	Working mode		During detail engineering			
	Quantity arrangement	ea	2 x 100%			
	Type		Centrifugal			
	Flow (Normal/ Rated)	m3/h	1 / 2			
	Service fluid		Water			
	Viscosity	cP	0.89			
	Specific gravity		During detail engineering			
	Vapor pressure	bar	1			
	Temperature		During detail engineering			
	Design - Min / Max	°C				
	Operating	°C	During detail engineering			
	Suction pressure (Max/ Rated)	barg	During detail engineering			
	Discharge pressure (Max/ Rated)	barg	During detail engineering			
	Head	m	differential pressure: 4 bar/ 40.8 m			
	NPSH a	m	During detail engineering			
	NPSH r	m	During detail engineering			
	Rated power	kW	0.75			
	Mechanical		During detail engineering			
	Design Code		Manufacturer standard			
	Code Stamp		During detail engineering			
	Manufacturer		No			
	Material - Casing		During detail engineering			
	Material - Impeller		Cast Iron & SS 304			
	Flange type and rating		SS 304			
	Gasket		Inside: FF or RF / 150#			
	Anchor/ Setting bolt		tie in: RF / 150#			
	Empty Weight	kg	During detail engineering			
	Inspection & Test		Vendor to advise			
	FAT		A 325 / A307 (HDG)			
	Painting		30			
	Surface preparation and painting		During detail engineering			
2.2.8	8) GCX 01 AP 01/02 - Generation Water Transfer Pump 01/02					
	Process					
	Working mode		During detail engineering			
	Quantity arrangement	ea	2 x 100%			
	Type		Centrifugal			
	Flow (Normal/ Rated)	m3/h	0.5 / During detail engineering			
	Service fluid		Water			
	Viscosity	cP	0.89 / Vendor to advise			
	Specific gravity		1			
	Vapor pressure	bar	During detail engineering			
	Temperature					
	Design - Min / Max	°C	During detail engineering			
	Operating	°C	During detail engineering			
	Suction pressure (Max/ Rated)	barg	During detail engineering			
	Discharge pressure (Max/ Rated)	barg	During detail engineering			
	Head	m	differential pressure: 4 bar/ 40.8 m			
	NPSH a	m	Supplied: 50 m			
	NPSH r	m	During detail engineering			
	Rated power	kW	During detail engineering			
	Mechanical					
	Design Code		Manufacturer standard			
	Code Stamp		During detail engineering			
	Manufacturer		No			
	Material - Casing		During detail engineering			
	Material - Impeller		Cast Iron & SS 304			
	Flange type and rating		SS 304			
	Gasket		Inside: FF or RF / 150#			
	Anchor/ Setting bolt		tie in: RF / 150#			
	Empty Weight	kg	During detail engineering			
	Inspection & Test		A 325 / A307 (HDG)			
	FAT		30			
	Painting		During detail engineering			
	Surface preparation and painting		Manufacturer standard			
2.2.9	9) Chemical Injection Unit					
	Tank					
	Quantity	ea	PID: 2 (SMBF + Antiscalant)			
	Type		+ caustic			
	Main material		During detail engineering			
			tank			
			Polyethylene (PE)			

			MOBILE POWER PLANT NIAS (25 MW)		Doc. No. 9714-T000-139910B-MRS-006A	
			MATERIAL REQUISITION SHEET WATER TREATMENT PACKAGE		Rev. 1	5-Apr-2018
NO.	PARAMETER	UNIT	REQUIREMENT		NOTES	
	Capacity	m3	300 L			
	Size	mm	690 Dia x 870 H			
	Pump					
	Quantity	ea	PID: 4			
	Type		During detail engineering			
	Main material		PP/ PTFE / PVDF			
	Flow	m3/h	5 l/hr			
	Head	m	50			
	Rated power	kW	0.15			
	Size	mm	During detail engineering			
2.2.10	10) Chemical Cleaning Unit					
	Tank					
	Quantity	ea	1			
	Type		Cylindrical tank			
	Main material		FRP			
	Capacity	m3	500 L			
	Size	mm	800 Dia x 1000 H			
	Filter					
	Quantity arrangement	ea	1			
	Type		Cartridge			
	Size	mm	250 Dia x 500 H			
	Flow Rate (In/ Out)	m3/hr	100 lpm			
	Pressure					
	Design - Internal / External	barg	8			
	Operating - Inlet / Outlet	barg	5			
	Temperature					
	Design - Min / Max	°C	During detail engineering			
	Operating - Inlet / Outlet	°C	Ambient			
	Filter media - type/ material		Polypropylene			
	Max particle size	µm	5			
	Pressure drop (operating/ allowable)	bar	1			
	Filtration efficiency	%	up to 90			
	Material - main parts		SUS 304			
	Empty Weight	kg	50			
	Pump					
	Quantity	ea	1			
	Type		Centrifugal			
	Main material		Cast iron & SS 316			
	Flow	m3/h	5 l/hr			
	Head	m	30			
	Rated power	kW	2.2			
	Size	mm	During detail engineering			
2.2.11	11) Additional Equipment					
	Rejection Tank		Not necessary			
2.4	Piping and Valve					
	Pipe - Low P & T		PVC Sch. 80			
	Pipe - Demin water		SS304L			
	Pipe - Compressed air		Galvanized steel			
	Pipe - High pressure BWRO		SS304			
	Pipe - Dilute chemical (Acid)		CPVC			
	Pipe - Dilute chemical (Caustic)		SS304			
2.4	Control & Instrumentation					
	PLC manufacturer		Siemens			
	Control valve & Shut off valve manufacturer		KITZ & Hersey			
	JB manufacturer		Local Indonesian			
	Gauge/ Transmitter manufacturer		Suchy, Hanna, GF			
	Degree of protection - panel		IP 55			
	Cable entry of JB and panel		Bottom entry			
	Degree of protection- motor		During detail engineering IP 65			

			MOBILE POWER PLANT NIAS (25 MW)		Doc. No. 9714-T000-139910B-MRS-006A	
			MATERIAL REQUISITION SHEET WASTE WATER TREATMENT PACKAGE		Rev. 1	5-Apr-2018
NO.	PARAMETER	UNIT	REQUIREMENT		NOTES	
1	<b>GENERAL</b>					
	Equipment name		Waste Water Treatment Package			
	Quantity	ea	1 package			
2	<b>DESIGN DATA</b>					
	General Combination					
	Design Life		25 years			
	Local certification		Included if required			
	Environment Condition		Onshore/ Outdoor			
	Location (Onshore/ Offshore) (Indoor/ Outdoor)		Onshore/ Outdoor			
	Ambient air temperature (Min/ Avg/ Max)	°C	18 / 26 / 31			
	Design wind velocity	m/s	11.3 / 38			
	Relative humidity	%	88 / 89 / 91			
	Elevation	m	7.15 MLLWL			
	Available Utility Requirement					
	Instrumentation and Control		230 VAC / 1 phase / 50 Hz			
	Motor < 150 kW		400 VAC / 3 phase / 50 Hz			
	Instrument air utility	barg	Max 8.6			
2.1	<b>WASTE WATER TREATMENT PACKAGE</b>					
	Quantity	ea	1 package			
	Size	mm	8500 L x 7000 W			
	Inlet water analysis		Oily water COD : TBA mg / L Oil : 50 ppm			
	Outlet water specification		COD: 300 mg/L TOC: 110 mg/L Oil and Fat: 15 mg/L  As per Peraturan Menteri Negara Lingkungan Hidup Nomor 08 Tahun 2009 Tentang Baku Mutu Air Limbah Bagi Usaha dan/atau Kegiatan Pembangkit Listrik Tenaga Termal			
	Empty Weight	kg	4900			
	Operating Weight	kg	18600			
2.1.1	<b>1) GUB 01 BB 01 - Oily Water Separator</b>					
	Process					
	Quantity arrangement	ea	1			
	Type		Gravity Separator with CPI			
	Size	mm	4000 mm X 2000 mm X 2500 mm			
	Service fluid		Oily water COD : TBA mg / L Oil : 50 ppm			
	Flow Rate (In/ Out)	m <sup>3</sup> /hr	5			
	Pressure		Atm			
	Design - Internal / External	barg	During detail engineering			
	Operating - Inlet / Outlet	barg	Atm			
	Temperature		During detail engineering			
	Design - Min / Max	°C	Amb			
	Operating - Inlet / Outlet	°C	Amb			
	Filter media - type/ material		CPI & Skimmer			
	Qty of filter element	ea	During detail engineering			
	Max particle size	µm	During detail engineering			
	Pressure drop (operating/ allowable)	bar	During detail engineering			
	Filtration efficiency	%	Up to 80 %			
	Cycle time - minimum	hr	During detail engineering			
	Availability factor - minimum	%	During detail engineering			
	Achievable turndown	%	During detail engineering			
	<b>Mechanical</b>					
	Design Code		During detail engineering			
	Code Stamp		Not applicable			
	Manufacturer		During detail engineering			
	Thickness	mm	During detail engineering			
	Corrosion allowance	mm	During detail engineering			
	Material - main parts		CS with Epoxy Coating			
	Flange type and rating		During detail engineering			
	Gasket		During detail engineering			
	Anchor/ Setting bolt		A 325 / A307 (HDG)			
	Empty Weight	kg	4000			
	Test Weight	kg	16000			
	<b>Inspection &amp; Test</b>					
	Non Destructive Testing		During detail engineering			
	FAT - pressure test		During detail engineering			
	Painting					
	Surface preparation and painting		During detail engineering			
2.1.2	<b>2) GUB 02 BB 01 - Neutralization Pond</b>					
	Process					
	Quantity arrangement	ea	1			
	Type		Concrete pit			
	Size	mm	4000 L x 4000 W x ? H			
	Service fluid		Oily water			
			During detail engineering			



			MOBILE POWER PLANT NIAS (25 MW)		Doc. No. 9714-T000-139910B-MRS-006A	
			MATERIAL REQUISITION SHEET WASTE WATER TREATMENT PACKAGE		Rev. 1	5-Apr-2018
NO.	PARAMETER	UNIT	REQUIREMENT		NOTES	
	Capacity	m3	During detail engineering			
	Pressure					
	Design - Internal / External	barg	Atm			
	Operating - Inlet / Outlet	barg	Atm			
	Temperature					
	Design - Min / Max	°C	Amb			
	Operating - Inlet / Outlet	°C	Amb			
2.1.3	3) Chemical Dosing Unit					
	Tank					
	Quantity	ea	1			
	Type		c/e PH sensor and control			
	Main material		During detail engineering			
	Capacity		PE			
	Size	m3	300 L			
	Pump	mm	During detail engineering			
	Quantity	ea	2			
	Type		Metering pump			
	Main material		PP/ PTFE/ PVDF			
	Flow	m3/h	5 l/h			
	Head	m	50			
	Rated power	kW	0.15			
	Size	mm	During detail engineering			
2.1.4	4) Piping and Valve					
	Pipe - General		CS galvanized			
	Pipe - Chemical		PVC			
2.1.5	5) Control & Instrumentation					
	Control panel manufacturer		Siemens			
	Control valve & Shut off valve manufacturer		KITZ & Hersey			
	JB manufacturer		Local Indonesian			
	Gauge/ Transmitter manufacturer		Suchy, Hanna, GF			
	Degree of protection - panel		IP 55			
	Cable entry of JB and panel		Bottom entry			
	Degree of protection- motor		IP 65			

**ATTACHMENT-4 PO NO. 9714-STA-3210003571  
PROCEDURE FOR INVOICING/ PAYMENT**

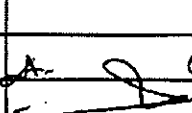

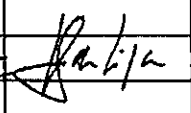
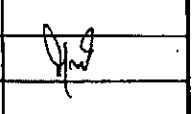


TRIPATRA

## PROCEDURE

DOC. NO.  
FC2- BP-003

### PROCEDURE FOR INVOICING/PAYMENT

						
B	30/11/2011	Re-issued for Review	Sudarsono	Sukumaran	Hara Siregar	Dhira Nandana
A	14/10/2011	Issued for Review	Sudarsono	Sukumaran	Hara Siregar	Dhira Nandana
REV	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY	

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## **1. Introduction**

Purchase Order (PO), Subcontract Agreement (SCA), and Surat Perintah Kerja (SPK) are commercial documents issued to the selected vendor or subcontractor after the technical clarification and negotiation process has been completed. The PO/SCA provides milestones or activity completion for claiming payment.

This procedure specifies the documents that are required to be submitted along with the invoice for each specified activity along the format/specimen forms, which the vendor should enclose.

## **2. Purpose**

The purpose of this document is to have a better understanding of the supporting documents so that invoices are processed for payment in a speedier manner without any delays.

## **3. Terminology**

- TPEC : PT. Tripatra Engineers and Contractors
- Vendor/supplier/  
subcontractor : Someone/company whose business is to supply a particular goods or services to TPEC
- Faktur Pajak : Tax invoice or domestic vendors only
- DGT-1 Form : Certificate of Domicile of Non Resident for Indonesia Tax Withholding. This form is to be completed by a person (which include a body of a person, corporate, or non corporate) who is a resident of a country which has concluded a Double Taxation Convention (DTC) with Indonesia and who claims relief from Indonesia Income Tax in respect of the following income earned in Indonesia (dividend, interest, royalties, income from rendering services, and other income) subject to withholding tax in Indonesia
- PO : Purchase Order
- SCA : Subcontract Agreement
- MRR : Material Receiving Report
- SPK : Surat Perintah Kerja
- DN : Delivery Note
- COD : Certificate of Domicile

#### **4. Procedure for Invoicing under Purchase Order**

Upon receipt of PO, the vendor is obligated to provide PO Acceptance and return them to TPEC as a formal acceptance of the PO.

The PO provides milestones (progress payment) or activity completion for claiming payment. Upon invoicing, vendor is to submit the original invoice along with supporting documents that provides as evidence to the agreed milestones. Below are the required documents for each milestone.

##### **A. Advance Payment**

The documents required for invoicing under "Advance Payment" milestones are:

- Original Invoice
- Performance Bond, if applicable (Annexure 1)
- Advance Payment Bond (Annexure 1)
- Copy of PO Acceptance
- Faktur Pajak (Tax Invoice for Domestic Vendors only)

##### **B. Payment due on Approval of Main Documents/Drawings**

The documents required for invoicing the above milestones are:

- Original Invoice
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Main Drawings and Documentations Approval Certificate signed by TPEC (Form No. 1)
- Copy of PO with highlight on the relevant payment stage

##### **C. Payment due for Receipt of Major Material at Factory/Shop**

The documents required for invoicing the above milestones are:

- Original Invoice
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Certificate for Completion Receipt of Major Materials at Factory signed by TPEC representative (Form No. 2)
- Copy of PO with highlight on the relevant payment stage

##### **D. Payment due on Testing/Assembly/Hydrotesting**

The documents required for invoicing the above milestones are:

- Original Invoice

- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Certificate for Completion of Testing signed by TPEC representatives (Form No. 3)
- Copy of PO with highlight on the relevant payment stage

**E. Payment before Shipment**

The documents required for invoicing the above milestones are:

- Original Invoice
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Inspection Release Notice signed by TPEC representative (Form No. 4)
- Packing List
- Copy of PO with highlight on the relevant payment stage

**F. Payment on Shipment or after Shipment**

The documents required for invoicing the above milestones are:

- Original Invoice
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Inspection Release Notice signed by TPEC representative (Form No. 4)
- Packing List
- Copy of Bill of Lading
- Delivery Order signed by TPEC representative / TPEC appointed forwarder
- Copy of PO with highlight on the relevant payment stage

**G. Payment on Delivery of Materials**

- Original Invoice
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Packing List
- Inspection Release Notice signed by TPEC representative, if applicable (Form No.4 )
- Copy of Bill of Lading, if applicable
- Delivery Order signed by TPEC representative or TPEC appointed forwarder
- DGT-1 Form or COD, if applicable (Form No. 5)
- Copy of PO with highlight on the relevant payment stage

#### H. Payment due on Submission of Final Documentation

- Original Invoice
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Certificate for Completion of Final Documents as per Purchase Order (MDR) signed by TPEC (Form No. 6) complete with MRR (Material Receiving Report)
- Copy of PO with highlight on the relevant payment stage

### 5. Procedure for Invoicing under Subcontract Agreement

Upon receipt of SCA, the vendor is obligated to provide SCA Acceptance and return them to TPEC as a formal acceptance of the SCA.

The SCA provides progress payment or activity completion for claiming payment. Upon invoicing, vendor is to submit the original invoice along with supporting documents that provides as evidence to the agreed milestones. Below are the required documents for each progress.

#### **EPC PROJECT**

##### A. Advance Payment

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Performance Bond, if applicable
- Advance Payment Bond
- Insurance Certificate
- Copy of SCA

##### B. First Payment

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Performance Bond, if applicable
- Insurance Certificate
- Progress Report approved by authorized TPEC personnel (Form No. 7)
- Copy of SCA



#### **C. Monthly Progress Payment**

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Progress Report approved by authorized TPEC personnel (Form No. 7)
- Copy of SCA

#### **D. Last Progress Payment**

1. Upon issuance of Mechanical Completion Certificate :
  - Original Invoice and Receipt (Kuitansi)
  - Faktur Pajak (Tax Invoice for Domestic Vendors only)
  - Progress Report approved by authorized TPEC personnel (Form No. 7)
  - Mechanical Completion Certificate (Form No. 8)
2. Upon issuance of Provisional Acceptance Certificate :
  - Original Invoice and Receipt (Kuitansi)
  - Progress Report approved by authorized TPEC personnel (Form No. 7)
  - Provisional Acceptance Certificate (Form No. 9)
  - Warranty Bond (Annexure 1)
  - Affidavit and Final Release and Waiver of Liens (Form No. 10)
  - Copy of SCA

### **SERVICES**

#### **A. House Rental**

- Original Receipt (Kuitansi)
- Berita Acara Serah Terima Rumah Sewa (Form No. 11)
- Copy of House Certificate (Surat Kepemilikan Rumah)
- Copy of PBB (Pajak Bumi dan Bangunan)
- Copy of Surat Perjanjian Sewa Menyewa Rumah

#### **B. Car Rental**

- Original Receipt (Kuitansi)
- Original Invoice
- Copy of STNK on the rented car
- Copy of driver's Driver License (SIM)

- Original Berita/Surat Serah Terima Kendaraan. The photocopy shall be attached for the remaining invoices.
- Berita/Surat Serah Terima Kendaraan Pengganti, if there is a change in vehicle unit.
- Original time sheet of the rented vehicle which has been signed by the driver and TPEC's representative at Site.
- Copy of Insurance
- Copy of SPK / SCA

**C. Photocopy Machine Rental**

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Results check on the number of sheets used for photocopy (original counter check)
- Copy of Surat Perintah Kerja (SPK)

**D. Catering**

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Certificate of acceptance on the food delivery from the catering service
- Copy of SPK
- MRR or Delivery Note

**E. Equipment Rental**

**1. Upon Mobilization**

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Berita Acara Mobilisasi signed by both parties (Form No. 12)
- Copy of Surat Perintah Kerja (SPK) signed by both parties

**2. Upon Demobilization**

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Berita Acara Demobilisasi signed by both parties (Form No. 13)
- Copy of Surat Perintah Kerja (SPK) signed by both parties

### 3. Equipment Rental

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Berita Acara Pekerjaan Bulanan signed by both parties (Form No. 14)
- Copy of Surat Perintah Kerja (SPK) signed by both parties
- Original timesheet signed by operator and user

### F. Internet

#### 1. Upon Installation

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Berita Acara Siap Operasi from the internet provider

#### 2. Monthly Subscription

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)

### **EXPEDITING**

#### A. Indonesian Vendors

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Original timesheet and summary timesheet of assigned inspectors duly approved by TPEC Representative/Client
- Original Inspection Report and Expediting Report Document (Form No. 15)
- Copy of Subcontract Agreement (SCA)

#### B. Overseas Vendors

- Original Invoice
- Original timesheet and summary timesheet of assigned inspectors duly approved by TPEC Representative/Client
- Original Inspection Report and Expediting Report Document (Form No. 15)
- DGT-1 Form
- Copy of SPK / SCA

## **TECHNICAL ASSISTANCE**

### **A. Indonesian Vendors**

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Original timesheet and summary timesheet of assigned technical assistance duly approved by TPEC Representative/Client
- Certificate of Technical Assistance Completion using Vendor's letterhead (Form No. 16)
- Copy of Activity Report
- Copy of Subcontract Agreement (SCA)

### **B. Overseas Vendors**

- Original Invoice
- Original timesheet and summary timesheet of assigned technical assistance duly approved by TPEC Representative/Client
- Certificate of Technical Assistance Completion using Vendor's letterhead (Form No. 16)
- Copy of Activity Report
- DGT-1 Form
- Copy of SCA

## **LOGISTICS**

### **1. After material/equipment arrival at destination**

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Bukti Penerimaan Barang, PIB, SPPB and Setoran Pajak
- Copy of Surat Perintah Kerja signed by both parties

### **2. Upon advance payment (50% of the invoice)**

- Original Invoice and Receipt (Kuitansi)
- Faktur Pajak (Tax Invoice for Domestic Vendors only)
- Packing List
- Copy of Surat Perintah Kerja signed by both parties

### **3. Upon completion (remaining 50%)**

- Original Invoice and Receipt (Kuitansi)

- Packing List
- Copy of Bill of Lading
- Original Certificate of Work Completion using Vendor's letterhead (Form No. 17)
- Copy of Surat Perintah Kerja signed by both parties

## **6. Appendix**

To support the explanation of this manual, TPEC has prepared appendices that will be used during the project execution.