



PHOS AGRO AMMONIA (PAA)

CONSTRUCTION QA-QC PLAN



CONSTRUCTION QA-QC PLAN

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CONSTRUCTION QA-QC PLAN



1. General

Construction QA-QC Plan is YAMATA's stated policy to deliver a quality product, satisfying in all respects the requirements of YAMATA and the client.

This policy applies to both YAMATA's work, and work performed by its subcontractors and is carried out through the application of sound engineering, procurement, and construction methods.



CONSTRUCTION QA-QC PLAN



2. Field Monitoring and Program Administration

a) Earthwork and Sitework

- Quality Control methods for earthwork generally follow the recommendations of the Geotechnical Report as conveyed in the drawings and specifications.
- Lines and grades are verified by the survey team and inspection of the materials are carried out by the YAMATA field staff in conjunction with the Geotechnical Consultant.



CONSTRUCTION QA-QC PLAN

2. Field Monitoring and Program Administration



a) Earthwork and Sitework

- When applicable, material testing of densities and other pertinent soil data are coordinated through local testing firms.
- Excavation and backfill placement techniques are monitored by the YAMATA field staff and documented to ensure conformance to the specifications and safety standards.



CONSTRUCTION QA-QC PLAN

2. Field Monitoring and Program Administration



b) Buildings and Structures

- All buildings are designed, fabricated, and built in accordance with the latest edition of the applicable specifications, codes and standards.
- Building materials, equipment, systems and appurtenances are inspected upon receipt by the YAMATA field staff for conformance to specifications.



CONSTRUCTION QA-QC PLAN



2. Field Monitoring and Program Administration

b) Buildings and Structures

- Erection and installation of the material, equipment, systems and appurtenances are performed in accordance with approved drawings and manufacturer's recommendations.
- Equipment and system tests are made and/or witnessed by the field staff on all installed equipment and systems to verify that the building components meet the performance criteria. Test results are witnessed, signed off, and recorded.





2. Field Monitoring and Program Administration

c) Structural Steel

- Structural steel materials are certified as meeting the required sizes and the grades prior to fabrication.
- Steel fabrication plants are inspected and approved by YAMATA. Approved steel fabrication plants have Quality Control Program for the fabrication and welding of structural steel in place.
- Fabricated steel is erected in accordance with the approved erection drawings, and the field staff verifies that the correct erection sequence, bolt up, plumbing and leveling of the steel to the final steel structure is performed.



d) Concrete

- The supply and placement of reinforced concrete are done in accordance with the Russian Norms and the project specifications.
- Local batch plants are inspected for their ability to produce quality concrete in conformance with the project specifications.
- Concrete suppliers are required to have demonstrated QCP in place for producing consistent, quality concrete.





d) Concrete

- The YAMATA field staff inspects placing techniques to ensure transportation, consolidation, and protection of the concrete meets project requirements.
- The YAMATA field staff will ensure reinforcing steel is of proper size and grade (for mill certificates) and is placed in accordance with the drawings.





e) Piping

- Piping materials are certified as meeting the required sizes and the grades prior to pre-fabrication.
- Piping pre-fabrication plants are inspected and approved by YAMATA. Approved piping pre-fabrication plants have Quality Control Program for the pre-fabrication and welding of piping in place.
- Pre-fabricated piping is erected in accordance with the approved erection drawings, and the field staff verifies that the correct erection sequence, bolt up, plumbing, leveling, welding and testing of the piping to the final stage.





f) Equipment

- Equipment that is to be supplied and installed on the project is inspected upon receipt to ensure it meets the requirements set forth in the equipment requisition and purchase order. Where manufacturers design submissions are required, they are verified as approved by the Engineer.
- Vendors are also requested to provide proper performance and maintenance data.





f) Equipment

- Equipment storage procedures are maintained in accordance with the vendor requirements and recorded on Material Receiving Reports to verify the condition and temporary maintenance requirements.
- Installation of equipment follows the Vendor's suggested procedure, and the equipment is checked for level, alignment, and bolt down prior to testing.



CONSTRUCTION QA-QC PLAN



2. Field Monitoring and Program Administration

f) Equipment

- Equipment tests are made and/or witnessed on installed equipment by the YAMATA field staff to verify the component meets the performance criteria.
- Test results, along with alignment and bolt-down data, are recorded on the appropriate Quality Assurance document. Where engineer, Owner, or ASME Code representative request witnessing, they are notified by the field staff.
- In the case of subcontracted package work, the Subcontractor must demonstrate an equivalent Quality Assurance/Quality Control Program prior to commencing the work.



CONSTRUCTION QA-QC PLAN

2. Field Monitoring and Program Administration



g) Electrical

- Electrical materials and installation are in accordance with the applicable international codes and project specification. Vendor/manufacturer recommendation and project specifications will be followed for the material receiving, storage and handling.
- The YAMATA field staffs inspect material and equipment upon receipt and inspect electrical systems during mounting, installation, calibration and testing.
- Direct systems test are made and/or witnessed by the field staff, signed and recorded.



h) Instruments

- Instrument equipment, materials and installation are in accordance with the Russian Norms or other recommended practices.
- Vendors of materials and equipment provide design data or material reports for approval prior to the supplying components to the project.
- The YAMATA field staffs inspect material and equipment upon receipt and inspect instruments and control systems during mounting, installation, calibration and testing.
- Direct systems test are made and/or witnessed by the field staff, signed and recorded.

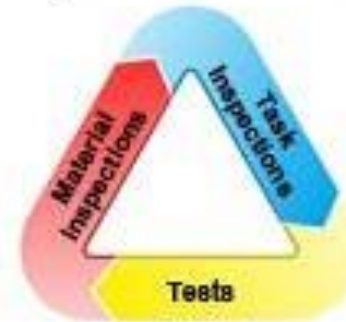


CONSTRUCTION QA-QC PLAN

3. QA-QC Cycle




Inspection & Test Plans



CONSTRUCTION QA-QC PLAN

4. SAMPLE ITP Documents






VISUAL INSPECTION REPORT

	Job No.	
	Report No.	

Project Name	Procedure / Instruction No.	
Customer Name	Item No.	
Dwg No.	Weight	
Process No.	Thickness	
Part Name	Applied Code	
Joint No.	Lighting	
Equipments	Illuminator	
Visual Aids	Lux	
	Surface Condition	
Remarks		

Date	Date	Date
Performed By: QC Inspector	Approved By: QC Supervisor	Witnessed By: QC Manager
Sign:	Sign:	Sign:



REPORT NO: _____

PRESSURE TEST REPORT

Job No.	Item No.
Procedure & Instruction No.	Item Name.
Customer	Dwg. No.
Serial No.	Operator No.

Specification	Hydrostatic Test		Pneumatic Test	
	..... Psi	..... Kg/cm ²	..... Psi	..... Kg/cm ²
Design Pressure	..... Psi	..... Kg/cm ²	..... Psi	..... Kg/cm ²
Test Pressure	..... Psi	..... Kg/cm ²	..... Psi	..... Kg/cm ²
Test Temperature	..... °F	..... °C	..... °F	..... °C
Test Medium	..... Min/Hr		..... Min/Hr	
Test Duration				
Pressure Gauge Range				
Actual	Test Pressure	..... Psi	..... Psi	..... Kg/cm ²
	Test Temperature (Metal)	..... °F	..... °C	..... °F
	Time-Test Was	Started:	Duration:	Started:
		Completed: Min/Hr	Completed:
Gauge I.D. No.				
Test Date				

Test Accepted	Yes	No	Yes	No
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Remarks (if test is not accepted state why in remarks):

HYDROSTATIC AND/OR PNEUMATIC TEST(S) ARE APPLIED AT THE ABOVE VALUES ACC. TO SPECIFICATIONS AND NO OBJECTIONS WERE FOUND ON THE ITEMS

Inspected By: QC Inspector	Reviewed by: QC Manager	Witnessed by: AI

CONSTRUCTION QA-QC PLAN

4. SAMPLE ITP Documents



CONTROL LIST OF MEASURING & TEST EQUIPMENT

LOG NO	
SHEET	OF

NO	SERIAL NO	EQUIPMENT NAME	MAKER	MODEL NO	SPECIFICATION	NEXT CAL. DATE	USER	REMARK	QCS*	DATE*

* to be initiated and dated by the QC Supervisor



CALIBRATION CONTROL LIST

No	Type of Equipment	Calibration S.T.D. Procedure	Remarks	QCS*	Date*
1	Rockwell Hardness Tester				
2	Universal Tensile Tester				
3	Charpy Impact Tester				
4	Multimeter				
5	PWHT Recorder				
6	Thermometer (for impact test specimens)				
7	Micrometer				
8	Vernier Callipers				
9	Pressure Gauge				
10	Master Gauge				
11	Welding Equipment				
12	Welding Machine				
13	Drying Oven				
14	Densitometer				

* to be initiated and dated by QC Supervisor



5. Quality Audits

- Quality Audits provide an independent evaluation and check of the quality-related activities and procedures used on YAMATA projects.
- Audits are carried out on both YAMATA's quality performance and on that of its sub contractors.





6. Follow-up

Follow-up is essential to verify that commitments to correct deficiencies are made, and that the deficiencies are corrected.

- The Construction Manager provides initial follow up.
- Regular quality audits supplement field control.
- Knowledgeable personnel are available to our site staff from engineering department for quality problem solving during all stages of construction.
- Success and safety are ensured by YAMATA management's commitment to a high quality project.

CONSTRUCTION QA-QC PLAN

7. Quality & HSE Certificates



ETÜSERT
KALİTE SERTİFİKASYON MERKEZİ

Certificate

Awarded to

YAMATA YATIRIM İNŞAAT TURİZM VE TİCARET A.Ş.
ÇUBUKLU MAH. ORHAN VELİ KANIK CAD. NO:11
BEYKOZ - İSTANBUL / TÜRKİYE

ETÜSERT Quality Certification Center certify that the Quality Management System of the above organization has been assessed and found to be in accordance with the requirements of the standard.

ISO 9001:2008

SCOPE OF CERTIFICATION / REGISTRATION

TURNKEY DELIVERY CONSTRUCTION WORKS, BRIDGE, ROAD, PIPELINE AND PUMPING STATION, INDUSTRIAL CONSTRUCTION, AIRPORT CONSTRUCTION, ERECTION AND CONTRACTING WORKS

With the audits conducted, it has been proved that the requirements of the related standard have been met.
The usage and validity of this certificate proves that ETÜSERT QUALITY CERTIFICATION CENTER uses the standard (EN 17021) & national and international certification rules.

Issue Date: 02.09.2012 Validity Date: 03.09.2015


ETÜSERT Quality Certification Center Manager

Certificate No.: ETR90-200/0523

For the information about the validity of this certificate please visit www.etusert.com
The validity of the certificate depends on the audit conducted periodically on auditee's quality system and the audit conducted at least once a year inside auditee system.



ETÜSERT
KALİTE SERTİFİKASYON MERKEZİ

Certificate

Awarded to

YAMATA YATIRIM İNŞAAT TURİZM VE TİCARET A.Ş.
ÇUBUKLU MAH. ORHAN VELİ KANIK CAD. NO:11
BEYKOZ - İSTANBUL / TÜRKİYE

ETÜSERT Quality Certification Center certify that the Environmental Management System of the above organization has been assessed and found to be in accordance with the requirements of the standard.

ISO 14001:2004

SCOPE OF CERTIFICATION / REGISTRATION

TURNKEY DELIVERY CONSTRUCTION WORKS, BRIDGE, ROAD, PIPELINE AND PUMPING STATION, INDUSTRIAL CONSTRUCTION, AIRPORT CONSTRUCTION, ERECTION AND CONTRACTING WORKS

With the audits conducted, it has been proved that the requirements of the related standard have been met.
The usage and validity of this certificate proves that ETÜSERT QUALITY CERTIFICATION CENTER uses the national and international certification standard and rules.

Issue Date: 02.09.2012 Validity Date: 03.09.2015


ETÜSERT Quality Certification Center Manager

Certificate No.: ETR90-600/0465

For the information about the validity of this certificate please visit www.etusert.com
The validity of the certificate depends on the audit conducted periodically on auditee's quality system and the audit conducted at least once a year inside auditee system.



ETÜSERT
KALİTE SERTİFİKASYON MERKEZİ

Certificate

Awarded to

YAMATA YATIRIM İNŞAAT TURİZM VE TİCARET A.Ş.
ÇUBUKLU MAH. ORHAN VELİ KANIK CAD. NO:11
BEYKOZ - İSTANBUL / TÜRKİYE

ETÜSERT Quality Certification Center certify that the Occupational Health and Safety Management System of the above organization has been assessed and found to be in accordance with the requirements of the standard.

OHSAS 18001:2008

SCOPE OF CERTIFICATION / REGISTRATION

TURNKEY DELIVERY CONSTRUCTION WORKS, BRIDGE, ROAD, PIPELINE AND PUMPING STATION, INDUSTRIAL CONSTRUCTION, AIRPORT CONSTRUCTION, ERECTION AND CONTRACTING WORKS

With the audits conducted, it has been proved that the requirements of the related standard have been met.
The usage and validity of this certificate proves that ETÜSERT QUALITY CERTIFICATION CENTER uses the national and international certification standard and rules.

Issue Date: 02.09.2012 Validity Date: 03.09.2015


ETÜSERT Quality Certification Center Manager

Certificate No.: ETR90-800/0535

For the information about the validity of this certificate please visit www.etusert.com
The validity of the certificate depends on the audit conducted periodically on auditee's quality system and the audit conducted at least once a year inside auditee system.

CONSTRUCTION QA-QC PLAN

8. QA-QC Organization Chart

