

Kathmandu Upatyaka Khanepani Limited



Quarterly Operating Report
Third Quarter 2065/066
1 Magh – Chaitra 31, 2065
(14 Jan – 13 April 2009)

Kathmandu
Nepal

CONTENTS

Introduction.....	1
The Service Standards General Provision.....	1
Description of Service Area and Services	2
Tariff Structure.....	2
Service Standards Required	3
Water Quality Standards	5
Capital Investment and Asset Management.....	6
Service System.....	7
Branch Report 14 Jan to 13 April 2009	9
Number of connections	10
Sewerage department.....	11
Water Quality Central Laboratory.....	12
Tankre unit.....	15
On-going projects.....	15
Human Resources	16
Reports from General Administration.....	16
KUKL Central Procurement.....	17

INTRODUCTION

Kathmandu Upatyaka Khanepani Limited (KUKL), a public limited company was established in 2007 under the “Company’s Act” under a Public Private Partnership (PPP) model. The current shareholders of KUKL are the Government of Nepal (GON), Municipalities within the Kathmandu Valley (Kathmandu Metropolis and Lalitpur Sub-metropolis), Federation of Nepalese Chamber of Commerce and Industries (FNCCI)/Nepal Chamber of Commerce (NCC) and the Employees Trust. The Board of Directors of the Company consists of seven members including three independent Board Members.

A thirty-year license was granted to KUKL on 1 Falgun 2064 (13 February 2008) by the Kathmandu Valley Water Supply Management Board (KVWSMB) for operating the water supply and sanitation services in the service areas within Kathmandu Valley. KUKL took over responsibilities to operate the water supply and sanitation services under this license and a lease agreement for the same period (between KVWSMB and KUKL) on 13 Feb 2008. Three managers, General Manager, Administrative/Finance Manager and Technical Manager, were appointed on contract between March-April 2008 and are supported by three deputy managers and staff deputed from KVWSMB.

This third **Quarterly Operation Report for FY 2065/66 (2008/2009)** covering the third quarter period of 1 Magh -31 Chaitra 2065 (14 Jan to 13 April 2009) gives the details of the performance of KUKL with respect to the service standard described in the Service Standard Appendix of the License.

The Service Standards General Provision

The Service Standards Appendix consists of:

- The Service Standards General Provisions;
- The Service Standards Appendix Charts; and
- Attachment 1 to the Service Standards Appendix

The General Provision defined in the Terms of Operation of Services, are as per the following appendices included in the License.

- a) Appendix “1” – Description of the Service Area (the “Service Area Appendix”).
- b) Appendix “2” – Description of the Services (the “Services Appendix”).
- c) Appendix “3” – Description of the Service Standards required (the “Service Standards Appendix”).
- d) Appendix “4” – Description of the Capital Investment and Asset Management requirements (the “Capital Investment and Asset Management Appendix”).
- e) Appendix “5” – Provisions concerning the Tariff for future years (the “Tariff Appendix”).
- f) Appendix “6” – Provisions concerning the Arbitration (the “Arbitration Appendix”).

Description of Service Area and Services

There has been no change in the service area and services provided by KUKL during the reporting period.

Tariff Structure

The current tariff structure has been in effect from 17 September 2004. KUKL has prepared a proposal for tariff revision based on inflation. This proposal is under consideration by the Tariff Commission.

SERVICE STANDARDS REQUIRED

The summary of the performance achieved and assessment of standards are presented in the following table.

	Performance Standard	Performance by the Operator
Ensure the availability of water supply		
1	By the <u>beginning of the fourth year after the Start Date</u> , no less than 1 hour per day of water supplied at minimum 4 meter head for at least 90% of all connections	Not yet due
2	By the <u>beginning of the sixth year after the Start Date</u> , no less than 2 hours per day of water supplied at minimum 4 meter head for at least 90% of all connections	Not yet due
3	By the <u>beginning of the second year after the commissioning of Melamchi Project</u> , no less than 8 hours per day of water to be supplied at minimum 10 m head for at least 75% of all connections	Not yet due
4	By the <u>beginning of the fourth year after the commissioning of Melamchi Project</u> , no less than 8 hours per day of water to be supplied at minimum 10 m head for at least 95 % of all connections	Not yet due
Ensure water quality in the distribution system		
5	By the <u>beginning of the fifth year after the Start Date</u> , no less than 80% of water samples tested in a Calculation Period shall comply with the Water Quality Standards	Not yet due
6	By the <u>beginning of the second year after the commissioning of Melamchi Project</u> , no less than 95% of water samples tested shall comply with the Water Quality Standards	Not yet due
Ensure water quality at each water treatment facility		
7	From the <u>beginning of 2nd year after the Start Date</u> , compliance with the provisions of Attachment 1 to the Service Standards Appendix concerning the quality of treated water introduced into the treated water distribution network	Not yet due ¹
Operation of wastewater treatment plants		
8	By the <u>beginning of the sixth year after the Start Date</u> , all existing Wastewater Treatment Plants to be functional and wastewater to be diverted to Wastewater Treatment Plants to run each plant at least 90% of its hydraulic capacity	Not yet due ²

¹ Currently accomplishable for the three biggest treatment plants (Baude, Mahankalchaur, Bansbari). Substantial investment will be required to meet the requirements at the small plants.

	Performance Standard	Performance by the Operator
Wastewater Services		
9	By the <u>beginning of the fifth year after the commissioning of Melamchi Project</u> , waste water services in the form of sewer or on site sanitation should be made accessible to 90% of the population in the service area	Not yet due

² ADB assisted consultants and Project Preparation Technical Assistance will assist KUKL in identifying investment needs to achieve this target

WATER QUALITY STANDARDS

The water quality standards applicable under the License are as set out as the “Water Quality Standards”. WHO water quality standards are adopted for Nepal but national water quality standards supersede the WHO standard, where available.

KUKL has started to carry out testing of water sources in accordance with the following minimum requirements.

No	Activities as per license	Frequency	Remarks
1	Raw water control Treated water control For Chemical Water Quality Standards	All sources before & after wet seasons 2 x year	Carried out for major sources and plants Some of the testing will be out-sourced while the capacity of the Water Quality Unit is being strengthened
2	Water treatment & sources supplying direct into the networks <ul style="list-style-type: none"> - residual chlorine - turbidity - iron - color Where aluminum coagulants are used in the treatment process. Treated water to be tested on <ul style="list-style-type: none"> - pH - Aluminum 	1 x daily	Analyses and recordings are being done at the major treatment plants: Bode, Mahankhal Chaur and Bansbari Though it is currently not done at smaller treatment plants, sources and tube wells supplying directly into the networks due to lack of facilities, it is planned that chlorine testing will be done at site and other parameters will tested as permitted by resources by the central lab until on-site facilities are available.
3	Bacteriological test <ul style="list-style-type: none"> - treatment works - Raw water sources 	Daily monthly	Analyses and recording are being done at the major treatment plants Baude, Mahankhal Chaur and Bansbari
5	Distribution Network Random test Sampling methods, location in accordance with WHO Guidelines and to be agreed in advance with KVWSMB	25 locations x daily	Being carried out (see Appendix 1)
6	Samples on request of KVWSMB and to be provided within 4 h to KVWSMB	On request	Being carried out
7	To notify the KUKL Management of failures to meet water quality standards to report to KVWSMB		Being carried out

CAPITAL INVESTMENT AND ASSET MANAGEMENT

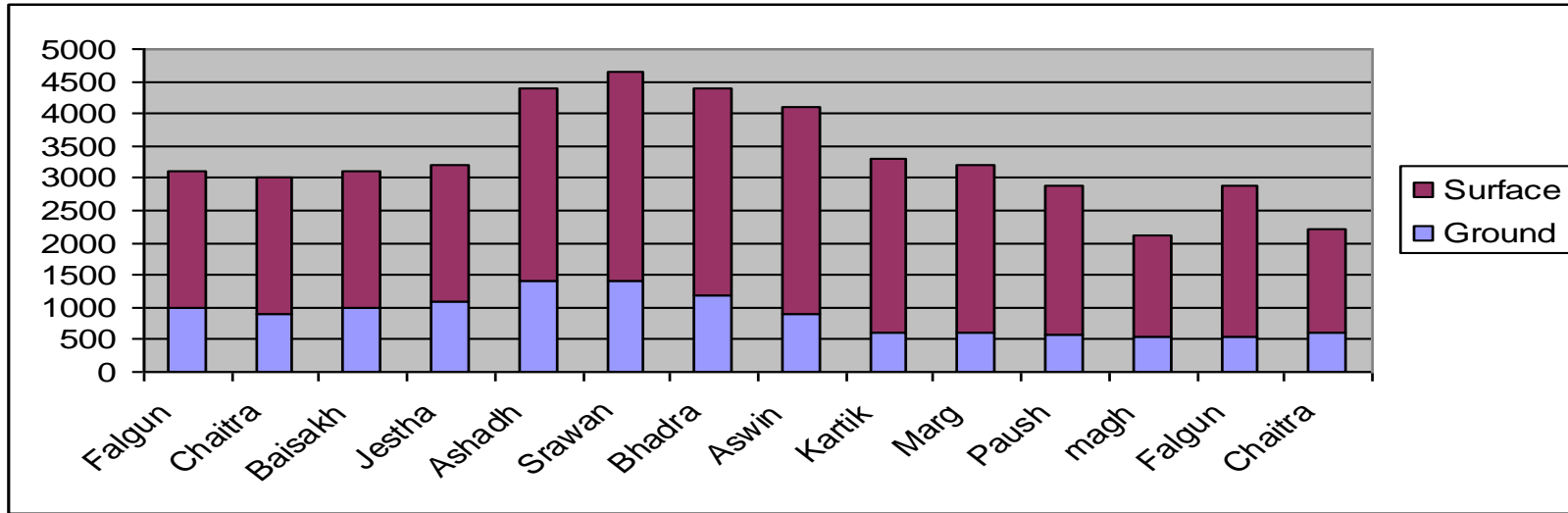
ADB assisted short term consultants and PPTA are assisting KUKL in preparing a detailed Capital Investment and Management Plan (CIAMP) which will be submitted to KVMSMB after 18 months of the start date as per the license requirement. Currently, the following activities that are identified as measures to improve immediate rehabilitation and improvement of the system are being undertaken.

	Description	Progress
1	Implement distribution network improvements covering an area in the south of ward 10 and ward 34 in the Kathmandu Municipality. (Demonstration Area)	As pilot area Ward 34 in Baneswor area has been identified for the first implementation. Tender documents have being reviewed and amended. A short term expert on Demonstration area is appointed
2	Implement a programme of bulk metering of all water sources water treatment works and service reservoirs.	Bulk water meters for all production (sources) facilities (I Priority) have being identified and specified and are under tendering process. Bulk water meters for treatment plant and service reservoir will be identified by the Consultant.
3	Enable the Operator to replace undersized mains, mains identified for urgent replacement, and other urgent works.	Two immediate work packages have been identified for which detailed design, cost estimation and tender doc prep has been completed. Similarly, a program for undersized mains (Spaghetti lines) will be identified by a short term expert. Recruitment is in Process.
4	Provide materials and equipment to the Operator for works to reduce unaccounted for water reduction.	Materials and equipment for reduction of UfW have being identified, specified and under tender process. A strategy for reduction of UfW has being developed by KUKL and is under implementation.

SERVICE SYSTEM

Water Production Report (Estimate)

Magh 2065 (Jan/ Feb 2009)											
Branch	Mahankal Chaur	Maharaj-guni	Tripuresh-wor	Banes-wor	Chhetra-pati	Lalitpur	Kirtipur	Kamaladi	Madhaya-pur Thimi	Bhaktapur	Total
Surface Water	24.66	5.43	2.0	0.0	0.0	11.25	2.44	0.0	7.75	Na	53.53
Ground Water	3.54	7.58	0.7	1.4	0.0	1.18	0.0	0.0	3.38	Na	17.78
Total [mld]	28.2	13	2.7	1.4	0.0	12.43	2.44	0.0	11.13	Na	71.3
Magh (29 d) [ml]	817.8	377.12	78.3	40.6	0.0	360.47	70.76	0.0	322.77	na	2067.7
Falgun 2065 (Feb/ March 2009)											
Surface Water	29.3	7.64	2.0	0.0	0.0	10.35	2.22	0.0	6.94	1.66	60.11
Ground Water	2.99	7.97	0.7	1.2	0.0	1.18	0.0	0.0	3.84	0.1	17.98
Total [mld]	32.29	15.61	2.7	1.2	0.0	11.53	2.22	0.0	10.78	1.76	78.09
Falgun (30d) [ml]	970.2	468.34	81.0	36.0	0.0	345.9	66.6	0.0	323.68	53	2342.7
Chaitra 2065 (March/ April 2009)											
Surface Water	29.32	3.1	2.0	0.0	0.0	10.35	2.22	0.0	5.02	1.66	53.67
Ground Water	3.1	8.58	0.7	1.2	0.0	1.45	0.0	0.0	4.82	0.1	19.95
Total [mld]	32.42	11.68	2.7	1.2	0.0	11.8	2.22	0.0	9.84	1.76	73.62
Chaitra (31) [ml]	972.6	362.08	81.0	36.0	0.0	354.0	60.6	0.0	295.45	53	2282.22



A month-wise summary of water production and distribution is presented below:

	Jan/Feb	Feb/March	March/ April
	2065/66		
Surface Water (ml/month)	1552.37	1803.3	1663.77
Ground Water (ml/month)	515.62	539.4	618.45
Total (ml/month)	2067.99	2342.7	2282.22
m ³ /month/conection	12.45	14.11	13.74
m ³ /day/conection	0.42	0.47	0.44

Branch Report 14 Jan. to 13April 2009

	Branch	Injection Points	No. of Tanker	Tanker per Day	No. Tanks	N0. of Leak	No. of Leaks	Pipe	No. of new Tap	Connection	New meter	Meter
		installed	distributed	average	installed	identified	repaired	repaired	installed	Changed	installed	repaired
1	Mahankal Chaur	3	822	9	0	484	484	284.9	35	107	202	101
2	Maharajguni	8	0	0	0	413	306	0	21	60	221	131
3	Baneswor	0	0	0	0	512	499	65	174	71	256	72
4	Kamaladi	3	87	1	0	68	68	0	6	6	347	37
5	Chhetrapati	14	544	7	0	48	46	309	12	52	70	16
6	Tripureshwor	3	742	8	0	120	120	0	10	49	149	102
7	Bhaktapur	0	15	1	0	22	22	0	0	7	18	6
8	Madhayapur Thimi	51	34	1	0	96	89	186	59	22	217	100
9	Lalitpur	9	355	4	2	438	432	453	11	24	314	135
10	Kirtipur	0	426	5	2	60	55	0	2	6	34	16
	Total	91	3025	36	4	2261	2121	1297.9	330	404	1828	716

Summary of Activities (14 Jan.- 13 April)

S.N.	Report on	Magh	Falgun	Chaitra	Total
1	Injection Points installed (No.)	16	32	43	91
2	Tanker Vehicles for Distribution (No.)	906	1011	1108	3025
3	Tanks installed (No.)	0.0	2	2	4
4	Leaks identified (No.)	789	745	727	2261
5	Leaks repaired (No.)	747	692	682	2121
6	Pipes repaired (meters)	257.4	424.5	616	1297.9
7	PublicTap installed (No.)	0	0	0	0
8	Connection changed (No.)	90	127	187	404
9	New consumer connection (No.)	205	52	73	330
10	New Meter Installed (No.)	995	456	377	1828
11	Water meter repaired (No.)	258	227	231	716
12	Bleaching Powder used (Kg)	14089	12119	11410	37618
13	Alum used(Kg)	2837	3340	5658	11835
14	PAC used(Kg)	4375	4900	4800	14075
15	Caustic Soda used (Kg)	750	980	1600	3330
16	Lime used (Kg)	100	0	0	100
17	All Staff (No.)	1221	1221	1329	1329
18	Technical Staff (No.)	544	560	401	401
19	Admin. & Acc. Staff employed; (No.)	667	661	928	928

Number of connections till Chaitra 2065

	Branch	Government Connection		Private Connection		Public Taps	Total
		Metered	Un-metered	Metered	Un-metered		
1	Tripureswor	187	108	16439	2312	137	19183
2	Chetrapati	42	6	11385	1464	180	13077
3	Maharajgunj	50	51	23626	2026	173	25926
4	Mahankal Chaur	73	45	20591	4506	137	25352
5	Baneswor	97	17	21857	1181	32	23184
6	Kamaladi	145	30	5348	221	20	5764
7	Lalitpur		32	29088	3951	314	33385
8	Bhaktapur	28	11	7575	405	203	8222
9	Thimi	18	5	5201			5224
10	Kirtipur	10	0	5436	81		5527
	Total	650	305	146546	16147	1196	164844

SEWARAGE DEPARTMENT

Magh 2065 - Chaitra 2065(Feb2009 April 2009)

S.N.	Description	Unit	Quantity
1	Application for new sewer house connection	No.	22
2	Number of house connection completed	No.	19
3	Complaints on sewer line blockage	No.	393
4	Cleaning of sewer line by jetting machine	No.	381
5	Repair and maintenance of sewer line/man holes	No.	30
6	Laying of new sewer line and manholes	m/No.	0.0

Water Quality Unit/Central Laboratory

A monitoring program was formulated by the Water Quality Unit and the Plan has been implemented from May 2008. The Unit is presently focusing on the control of free residual chlorine, iron and ammonium.

The Water Quality Unit carried out free residual chlorine tests of the distribution network with different branches. A summary for the months of Magh- Chaitra is presented below.

Free Residual Chlorine in Distribution Network:

Month: Magh 2065 (Jan/ Feb 2009)				
No	Branch	Total No of samples	Residual Chlorine [>0.1]	No. of Tests failed
1	Mahakal Chour	101	100	1
2	Maharajguni	50	50	0
3	Baneswor	69	38	31
4	Kamaladi	78	20	58
5	Chhetrapati	5	0	5
6	Tripureshwor	106	50	56
7	Bhaktapur	24	24	0
8	Madhayapur Thimi	78	74	4
9	Lalitpur	95	67	28
10	Kirtipur	28	19	9
	Total	634	442	192
	Per day	22	15	7

Month: Falgun 2065 (Feb/ March 2009)				
No	Branch	Total No of samples	Residual Chlorine [>0.1]	No. of Tests failed
1	Mahakal Chour	85	85	0
2	Maharajguni	136	135	1
3	Baneswor	59	44	15
4	Kamaladi	48	2	46
5	Chhetrapati	0	0	0
6	Tripureshwor	111	69	42
7	Bhaktapur	71	71	0
8	Madhayapur Thimi	32	32	0
9	Lalitpur	84	56	28
10	Kirtipur	0	0	0
Total		626	494	132
Per day		21	17	4

Month: Chaitra 2065 (March/ April 20098)				
No	Branch	Total No of samples	Residual Chlorine [>0.1]	No. of Tests failed
1	Mahakal Chour	35	35	0
2	Maharajguni	105	105	0
3	Baneswor	64	34	30
4	Kamaladi	28	0	28
5	Chhetrapati	0	0	0
6	Tripureshwor	134	80	54
7	Bhaktapur	6	3	3
8	Madhayapur Thimi	8	2	6
9	Lalitpur	58	0	17
10	Kirtipur	0	41	0
Total		438	300	138
Per day		14	10	4

During the reporting period, total chlorine and bacteriological tests carried out are as follows:

Analyses/Test	Total Number of Test	confirmation of Total Chlorine [traces & $> 0,1$]	No Chlorine Detection
Residual Chlorine	1698	1236 (72%)	462(28%)
Remarks:	From 1 Magh – 31 Chaitra 2065 on average 19 Samples were taken per day.		
Analyses/Test	Total Number of Test	Confirmation of non Coli forms [Nil]	Coli forms Detected
Coli forms [100ml]	286	189 (66 %)	97 (34 %)

Similarly, the water samples were analyzed for the following parameters.

Analyses in	WHO Guidelines	Total samples
Turbidity	< 5 NTU	811
Colour Hazen	< 15 units	862
pH	< 6.5 – 8.5	862
Total Alkalinity	30 – 60 mg/l	829
Total Iron	< 0.3 mg/l	829
Iron as NH₃		862
Chloride	250 mg/l	

Tanker Unit

The Tanker Unit will receive some 10 new Tankers under the ADB funding. Plans will be worked out (Tanker Plan) to improve the performance of the Unit.

The tanker operations during the reporting period are as follows:

No	Description	Magh	Falgun	Chaitra	Total
		Jan/ Feb	Feb/ March	March/ April	
1	Injection Points Ditribution	297	350	368	1015
2	Tanker vehicles for Public Distribution	257	425	519	1201
3	Poly Tanks Filling	533	566	481	1580
4	Private Distribution	1444	1272	1816	4532
	Total	2531	2613	3184	8328

ON-GOING PROJECTS

Progress till Chaitra 2065 (March -April 2009)

	Name of Project	Project status	Remarks
1	Balkumari Water Treatment Plant and 150cum RCC Reservoir	80% construction work completed	UNICEF Funding, will be completed by the end of Jestha
2	75cum RCC Reservoir, Generator House, Aerator cum fountain at Jwagal Tube Well Site	20% construction work completed	UNICEF Funding, will be completed by the end of Ashad.
3	Operation of Syuchatar tube well	All complete except pipe laying	Already completed
4	Operation of koteswar tube well	Tendering process complete	Tendering of pipes for interconnection completed
5	Operation of Damaichaghat tube well	Electrification work completed, Fabrication of column pipe completed	Will be completed within 20 days
6	Operation of Tyanglaphat tube well	Electrification work, fabrication of column pipe completed	Will be completed within 15 day
7	Operation of Khadka bhadrakali tube well	Tendering of pipes for interconnection completed	Will be completed within 30 day
8	Operation of Sanglekhola tube well	Tendering of pipes for interconnection completed	Will be completed within 30 day
9	Gw Lindaha water supply project	Tendering of supply and laying of trunk pipe line completed, tendering of intake works and electrification work completed	Will be completed by the end of Mangsir 2066

HUMAN RESOURCES

Till Chaitra 2065 (Till March - April 2009)

	Permanent			Contract			Daily wages		
	Tec	Adm	Total	Tec	Adm	Total	Tec	Adm	Total
Officer	82	57	139	1		1	1		1
Non officer	265	463	728	26	178	204	26	230	256
Total	347	520	867	27	178	205	27	230	257
Grand total	1329								

Staff list (section wise)

S.No.	Section/ Branches	Permanent staff	Contract	Daily wages	Total staffs
1	Head office	142	18	10	170
2	Tripureswar	65	20	21	106
3	Thimi	38	7	15	60
4	Tanker	33	3	3	39
5	Sewerage Dept.	47	1	2	50
6	Electromechanical	35	2	4	41
7	Maharajganj	103	25	48	176
8	Mahankalchaur	120	24	33	177
9	Kirtipur	30	13	17	60
10	Kamaladi	18	6	3	27
11	Jawalakhel	112	32	59	203
12	Chhetrapati	33	7	14	54
13	Bhaktapur	35	10	20	65
14	Baneswar	56	37	8	101
15	Total	867	205	257	1329

REPORT FROM GENERAL ADMINISTRATION

Magh 2065-Chaitra 2065 (Feb - April 2009)

S.N.	Description of Vehical Fuel	Unit	Vehicle No Tools/ equipment	Expenditure	Remark
1	Repair of Vehicle		NO/Tools/Equipment		
	(a) Jeep, Tankers, Cars, Pickup etc.	No.		78122.5	
	(b) Motor Cycles, Scooters etc	No.			
2	Fuel Expenses				
	(a) Petrol	Liter	7475		
	(b) Diesel	Liter	2400		
	(c) Mobil	Liter	189		
	(d) Other/Brake Oil	Liter	14.5		

KUKL CENTRAL PROCUREMENT

KUKL Central Procurement Division has made the following procurement 1 magh -31 Chaitra 2065 and the procurements under processing are as follows:

Kathmandu Upatyaka khanepani Limited

Main office

S. NO	Description of goods	Qty.	Unit	Estimated Amount (in 000)	Procurement Action Status			Procurement Process	Supplier	Estimated delivery	Remarks
					Tender & Receive order	Evaluation & Award	Agreement & Order				
1	Ductile Iron Fittings	1073	Nos	6000			Purchase ordered	Tender	Season Nepal (P) Ltd. Kathmandu	June 09	
2	Water testing Equipment Test kits & Chemicals	L.S.	L.S.	912	Receive offer	Processing		Tender		Aug 09	
3	Water Revenue Meters	12000	Nos	23000		Awarded	Agreement Processing	Tender	Lianyungang Liynli China	Sept. 09	
4	Stable Bleaching Powder	100	MT	1720				Direct	WHO	April 09	Already delivered
5	Poly Aluminium Chloride	25	MT	970			Purchase ordered	Direct	WHO	June 09	
6	Ledger & bill printing	L.S.	L.S.	600			Ordered	Tender	New Neelkantha offset press	May 09	Partial delivered
7	Stable bleaching powder	100	MT	1720	Requested for price offer			Direct	WHO	Aug. 09	
8	Alumunium sulphate	50	MT	1300	Requested for price offer			Direct	WHO	Aug. 09	
9	Generators	6	sets	9100		Awarded	Agreement Processing	Tender	Koshati Trading Biratnagar	July 09	
	Total Amount			31222							

