Forex Risk Management Policy

Submitted To,

Nagarjuna Fertilizers and Chemicals Limited



Submitted By:

Greenback Forex Services Pvt. Ltd.



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Section A

Background and Introduction

Company Background

The flagship company of the Nagarjuna Group, Nagarjuna Fertilizers and Chemicals Limited is a leading manufacturer and supplier of plant nutrients in India. It is one of the most recognized agricultural brands in India, who are dedicated in providing customers with solutions in plant nutrition, irrigation, farm services and plant management. Commencing operations in 1986-87, Nagarjuna Has the distinction of being the single largest private sector investment in Southern India. An ISO 9002 certified company; Nagarjuna's operational profits are one of the highest in the Industry.

NFCL is primarily engaged in the manufacture and trading of urea and other fertilizers like Muriate of Potash (MOP), Di-ammonium phosphate (DAP), fertiblend, speciality fertilizers (water soluble). It also manufactures and sells micro-irrigation equipments.

Turnover

- NFCL projection of turnover is Rs.5554 Cr., for FY 11-12.
- NFCL has a projection of fertilizer imports of one Million metric ton for FY 11-12 which accounts for approx. 60% of turnover.
- NFCL has a manufacturing capacity of 1.5 Million metric ton of urea.





Preamble to the Policy

- **Scope**: NFCL in this Forex Risk Management Policy has laid down its objectives of Forex risk management, the risk management organization structure, the benchmarks to measure performance, operational processes to identify, measure, monitor and manage Forex risks, appropriate control parameters and MIS reporting for the Forex Risk Management function.
- The policy covers the risk management of Forex Exposure that the company is exposed to owing to the volatility in the currency market and global interest rates.
- **Purpose:** In view of the amended comprehensive guidelines on derivatives issued by RBI vide Circular DBOD.No.BP.BC. 27 / 21.04.157 / 2011-12 dated 2nd August 2011; any entity desiring to enter into derivative transaction needs a Risk Management policy approved by the Board of Directors. This policy will act as a framework and enable NFCL to meet the necessary requirements of RBI.

This document is intended for the following:

The Board and the Chairman: As an aid for effective control over the currency risk management activities and for Corporate Governance purposes.

Directors, Chief Financial Officer: As a basis for discussion and review of operational activities and performance of the currency risk management function.

Treasury and related personnel: To provide the operating ground rules for currency risk management function.

Import-Export Departments: To provide ground rules for the identification and timely reporting of Currency exposures to treasury desk for further process.

Use of the Document

This Document is strictly confidential for the use of NFCL. It is not intended for wider distribution outside NFCL.





Section B

Forex Exposure Classification

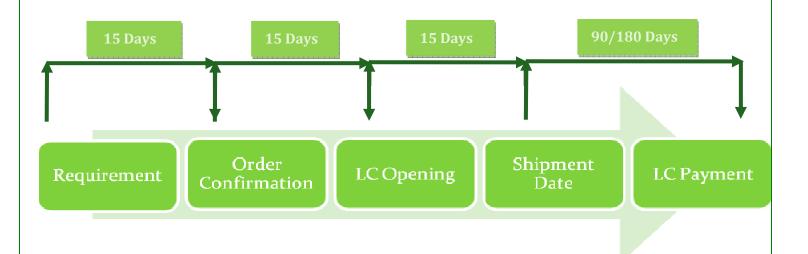
NFCL is exposed to Forex Risk as its imports are denominated in USD which is subject to fluctuations owing to the volatility in currency market. The other major details are as follows:

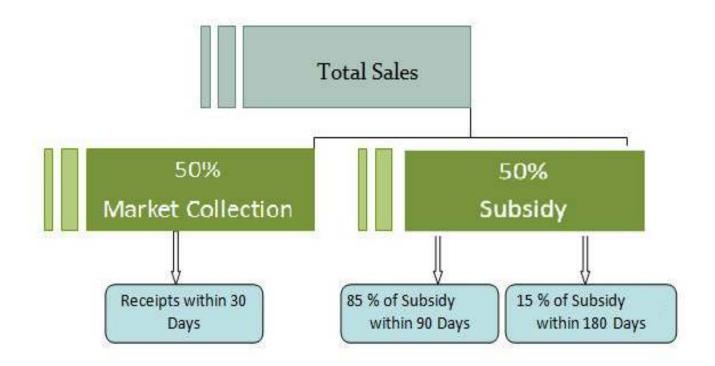
- **Countries:** NFCL major imports are from China, Russia, Europe and US.
- **Currencies**: 100% Imports are denominated in US Dollars.
- **Mode of Import**: All Imports are LC backed, with Usance of 90/180 Days.
- Banks: Major banks handling transactions are SBI, IDBI, SBH, ICICI
- Distribution of Import:
 - ➤ June October accounts to 60% of annual Import.
 - November February accounts to 40 % of annual Import.
 - ➤ March May can be treated as off season with no major import.
- **Import Financing Methods:** The imports are financed through Buyers/ Suppliers credit. However, in case of liquidity/arbitrage over rupee cost of funds the Usance period can be extended to 360 days.





Business Cycle:









Section C

Risk Management

1. Objectives of Risk Management

NFCL Risk Management philosophy would be risk mitigation through **a** policy of "Selective Hedging" of exposures. The broad objectives of the policy lay down with respect to Management of Currency risks would be:

- To manage risks to the budgeted costs and revenues from the adverse impact of currency fluctuations.
- **To reduce the Rupee cost** of the Company's foreign currency payables by selective hedging of exposures.
- **To achieve** results better than what would result from a passive, automatic 100% hedge policy.
- **To reduce the cost of funding** by raising funds in foreign currency, when advantageous, or use other approved instruments to achieve the same objective.
- **To reduce** transaction costs and bank exchange margins to bare minimum at the company level, across all business units, through effective negotiation with banks.

2. Management of Exposure:

Management of exposures on a Net basis vs. Gross basis

By and large, exposures at NFCL shall be managed on a Gross Basis in accordance with the various parameters defined in the Currency Risk Management Policy of NFCL. However, the exceptional unhedged positions can be managed on spot basis to minimize the transaction cost.

Management of exposures on a Portfolio vs. Individual Contract basis

The Treasury Desk will Monitor and Manage currency exposures on transaction basis but taking the hedging instruments for the same will be done on a Portfolio basis (bulk cover would be taken and individual exposures would be allocated to the cover), so as to derive the benefit of economies of scale.

3. Recognition of Exposure:

Introduction:

Recognition of exposure in simple words refers to identifying the forex risks associated with the said exposure. Recognizing the fact that company is exposed to the risk of exchange rate fluctuation and the *timing of the recognition* is of utmost importance to the success of the risk management process. Once the forex exposure is recognized, the onus of risk management shifts to the finance/Treasury department.





Imports:

NFCL shall recognize the currency risk associated with its import orders at the **Order stage. i.e. date of placing of order.** Since the gap between placing the order and establishing the L/C is very short, NFCL can consider the order date as the date for recognition of exposures. Moreover in case of NFCL, most of the orders translate into shipment and it has been seen in past that cancellation of orders is almost nil. Hence, the logic of adoption of order date as the stage of recognition holds good.

4. Benchmarking of Exposure:

Introduction:

Benchmarking could be defined as setting the target exchange rate for transactions. The target rates would then serve as yardsticks for performance evaluation. In fact without proper benchmarking, it becomes very difficult to evaluate the performance of the risk management process. The main task in the process of benchmarking is to decide upon the target rates to be achieved on exposures.

Imports:

NFCL for the purpose of currency risk management shall consider the First Day Forward Rate (FDFR) from the date of order till date of payment as the benchmark rate for Import exposures. Benchmark rate will be basis for all costing purpose. This will factor the number of days from order to opening of L/C to shipment and also the applicable Usance period.

For example: NFCL places an import order of \$ 1 million on 1st October, 2011. On 15th October the L/C is opened and 30th October the shipment is done. Hence, the due date for payment is 180 days from the shipment date. i.e. 30th April 2012. Let us suppose that the closing Spot Rate on 30th October 2011 is 49.00 and premium prevailing till 30th April 2012 is 90 paisa. Hence, the benchmark for this exposure would be 49.90 levels.

The benchmarking would work on the transfer pricing. i.e this will be the rate at which the marketing department will transfer the exposure to treasury. The treasury in turn can extend the credit period by way of Buyers credit/ Rollover and factor that interest saving as benchmark for the extended period.

5. Boundary Setting:

a. Stop Loss Strategy:

NFCL operates on an average margin, so it's important not only to have a benchmark but also equally important to have a stop loss strategy. Stop loss levels will restrict the loss on open positions in case the market variables move adversely. It is an important tool of risk management, whereby the risk management team recognizes that its view has gone wrong. Having done this, treasury takes an immediate action to cut short its losses instead of running the positions and entailing deeper losses.





There are broadly two methods of setting stop loss levels:

• Percentage to the Benchmark

In this case, NFCL would decide its stop loss level in terms of a percentage to the Benchmark. Once the level is set, it remains the same irrespective of any subsequent movement in the exchange rate.

For Example: Let us assume that the benchmark is 50.00 for an import transaction. Considering the stop loss at 1.5 % above the benchmark rate, the stop loss levels would be 50.75. In case the rupee moves above 50.75, NFCL would cover the same immediately to prevent further losses.

Absolute Terms

Here, NFCL would decide its stop loss in absolute paisa terms over the benchmark. In the above mentioned example, benchmark for import exposure is 50.00. NFCL may decide to have a stop loss of 50 paisa over the benchmark. That is, in case the rupee moves above 50.50, NFCL would compulsorily cover the same and thereby prevent further losses.

NFCL shall consider 1.50 % from the benchmark level as the Stop Loss Level for Import exposures. It is to be noted that in case of percentage to benchmark method, the stop loss in value basis would be different for each transaction unlike a fixed amount in case of the other mentioned method. Hence, it is more dynamic in nature and appropriate to adopt the percentage to benchmark method to be in line with the vibrant currency markets.

NFCL to follow either of the below mentioned strategy based on recommendation of FRMC.

- a) The treasury shall keep two stop loss levels for all exposures whereby at 1% stop loss they shall internally discuss on the action plan and on triggering of the upper stop loss level of 1.5%, the entire open exposure shall be compulsorily covered.
- b) In this case, at 1% stop loss the treasury shall cover 60-70% of the open exposures and on triggering of 1.5% stop loss the balance open exposure shall be compulsorily covered.

b. Take Profit Policy

Similar to a stop loss level, a take profit level would ensure that the gains are booked at appropriate intervals and levels. Take profit levels would put a monetary cap to the greed levels and see to it that MTM profits are not diluted by a reversal.

NFCL shall consider 1 % from the benchmark level as the Take profit Level for Import exposures.

For Example: Let us assume that the benchmark is 49.00 for an import transaction. Considering the take profit at 1% below the benchmark rate, the take profit levels would be 48.51. In case the rupee moves below 48.51, NFCL would cover the same immediately rather than taking further risk for better rates in the volatile market.





P.S: The take profit and stop loss levels for each of the exposures would be defined immediately as and when the benchmark is fixed.

c. Core Coverage:

Core cover is defined as the minimum exposure which needs to be covered at any point of time. Core cover could be defined in two manners. It could either be placed in terms of number of day exposure or as a percentage of total exposure.

The methods are enunciated as follows:

• Number of day exposures

A management decision to hedge all its imports falling due within a month's time could be an example of core cover in terms of time.

Percentage of exposures

A management decision to keep 'x' % of its exposures covered at any point of time could be an example of core cover in terms of percentage of exposure.

NFCL shall keep at least 20-30% of their total import exposure always covered.

6. <u>Hedging</u>

Hedging is primarily a function of the Benchmark rates. However, in order to optimize the gains by taking a calculated risk, NFCL could take a view based approach involving the banker/consultant to decide on the hedge amount. Further, utmost care should be taken that the above mentioned parameters of benchmark, stop loss, core cover etc are not violated in the process of hedging. Below mentioned are the guidelines which need to be adhered to while hedging:

A) Authorized Instruments

The risk management policy authorizes NFCL to use the following tools to hedge their currency risk on trade exposures:

1. *Forwards:* Forward contracts can be booked for a fixed date or option period. Cover can be rolled over in case of deferral of payment. The contract has to be booked based on recommendation of Banker / Consultant

2. Plain Vanilla options:

- a) Premium paying plain vanilla options*
- b) Zero Cost Range forwards without leverage





*Option Premium to be treated as a finance cost.

NFCL can consider a Basket hedging strategy with the combination of Forward, Plain Vanilla Option, Range Forward and Open positions.

Incase of long term loan exposures the following **hedging Instruments** shall be used:

Hedging of Exchange Risk:

- Forward Contract
- Options
 - o Plain Vanilla
 - o Zero Cost excluding Seagulls, leverage options and other exotic option structures.
- Swaps
 - Cross Currency Interest Rate Swap (CCIRS) wherein NFCL would hedge against both the variability in currency and interest payments.
 - o Principal Only Swap (POS) wherein NFCL would hedge against the currency risk on Principal Repayments.
 - Coupon Only Swap (COS) wherein NFCL would hedge against the variability in interest along with the currency risk on in interest payments.
- Any combination of the above

Hedging of Interest Rate Risk:

- Interest Rate Swap (IRS)
- Forward Rate Agreement (FRA)

The following points need to be adhered with at the time of executing any hedge positions:

- a. Any particular foreign exchange exposure can be hedged through options only to the extent of **50%** of the total amount at the discretion of CFO.
- b. Out of the above mentioned limit of 50% hedging through options, at any point in time the usage of Zero Cost Range Forwards in the option mix shall not exceed **20%**.
- c. All penalty and leveraged structure options should be strictly avoided by NFCL since the quantum of actual losses incase of such instruments are uncertain if the market behaves unfavorable to the view taken by the company.
- d. Hedging can also be done in parts or staggered manner. A part of the total deal can be initiated (say part deal of USD 1 million from total deal of USD 5 million) and depending upon the suitability of the rates and market movements the remaining part of the total deal can be executed based on the discussion in the Treasury Committee.





- e. In the event of pre-payment / reduction / cancellation of the underlying Notional, the currency hedge undertaken against such an underlying shall be unwound to the extent the notional exceeds the underlying within 15 days of pre-payment / reduction / cancellation of the underlying.
- f. NFCL shall maintain a Comparative Summary of quotes from at least two banks before finalizing any hedging transaction
- g. NFCL shall not execute exotic derivative products which are disallowed by AS 30 in order to hedge its Forex risks.
- h. NFCL shall be open to usage of new derivative products available in the market provided for hedging its trade exposure provided that such a product is hedge compliant as per AS 30. Further, such usage of new derivative product shall be subject to a prior approval by the Board of Directors / Risk Management Committee (RMC).

B. Authorized Personnel and limits:

In order to ensure authority / responsibility criteria are adhered to in execution of transactions, specific limits have been assigned to various persons. To maintain a balance between autonomy and controls, appropriate authority is given in the matrix below so that no person at any point of time, whether knowingly or unknowingly, exceeds his / their authority. For this purpose, authorization levels for various actions carried out by the Front office Desk are predefined as follows:

Authorized Personnel

Sr. No.	Name	Designation	Tenor	Instrument-wise Authorize Limit (in \$ million)			Total Limit(\$)
				Fwd	Fut.	Opt	
1		GM / DGM Treasury	Up to 1 year**				
2		Sr. GM Finance	Up to 3 year**				
2		Chief Financial Officer(CFO)	Up to 5 year**				
4		Managing Director(MD)/ RMC	Above 5 years**				

^{**} The limits mentioned in the above table are indicative and may be reviewed and changed periodically.

• The signing of the transaction as per the above table would be valid only when both the conditions of Tenor and Amount are satisfied simultaneously.





- Where the currency of hedge is different from the currency of underlying exposure, a written approval from the Chief Financial Officer is required.
- Specific written approval from appropriate authority should be taken for each transaction individually.

Other Key Points:

- 1) NFCL also imports specialty fertilizers through Open Credit / Cash against Documents (CAD) where the value is not very large. However, since such imports are for trading purpose they should be mandatorily hedged on above parameters. i.e. Recognition, benchmarking etc with more focus on stop loss.
- In case of those exposures which are covered by subsidy and there are chances that subsidy could get delayed resulting into rollover of the exposures, then the foreign currency should be hedged for the tenor including the rollover period. Incase the rollover is not being done; the hedged contract can be taken as early delivery.

Other Guidelines:

No derivative structure can be entered into unless an appropriate Board resolution has been passed. The Board resolution, amongst other things, shall:

- be signed by a person, other than the persons, authorized to undertake the transactions;
- be specific and should articulate specific products, amount and tenor that can be transacted;
- also mention the person(s) authorized to sign the ISDA and similar agreements;
- Explicitly mention the limits assigned to a particular person; and specify the names of the people to whom transactions should be reported by the bank. These personnel should be distinct from those authorized to undertake the transactions.

Further, in adherence with the RBI circular RBI/2010-11/338 A.P. (DIR Series) Circular No, 32 dated December 28, 2010 which includes, amongst other things, the following guidelines which needs to be honored:

- The maturity of the hedge should not exceed the maturity of the underlying transaction
- Where the exact amount of the underlying transaction is not ascertainable, the contract may be booked on the basis of reasonable estimates with periodical review.
- The facility of *cancellation and rebooking* for current account transactions and capital account transactions *within 1 year* would not be permitted unless the exposure information, as prescribed by the bank, is submitted.
- The facility of cancellation and rebooking is not permitted for forward contracts, involving Rupee as one of the currencies, booked by residents to hedge capital account transactions for tenor greater than one year.





- In case of *trade transactions* being the underlying, the tenor of the structure shall not *exceed two years* in case of cost reduction structures.
- In case of derivative transactions booked based on *contracted exposures*, import/export *documents* should be submitted to the banker within a *maximum of 15 days* from the date of booking of the derivative contract and in event of non adherence of the same on more than 3 occasions in a financial year, future bookings shall be permitted on production of underlying documents only.
- Only plain vanilla European options can be entered into.
- The notional principal amount of the swap should not exceed the outstanding amount of the underlying loan





Section D

Role Identification

For ensuring the effectiveness from control perspective of the risk management process, the treasury shall be segregated as follows:

- Front Office
- Back Office

Front Office:

The front office is the operational desk of the treasury. It would include the nominated personnel who would carry out the final execution of the transaction. The front office would report to *CFO*.

The Front Office will perform the following functions:-

- a) Track exchange Rate Movements
- b) Analyze the micro and macro factors affecting the markets
- c) Monitor exposures in light of market dynamics
- d) Hedge Exposures within the ambit of the provisions laid down in this document.
- e) Execution of decisions laid down as per the defined take profit and stop loss levels for open positions.
- f) Analyze structures with appropriate risk reward and internal suitability by getting quotes from at least two Banks
- g) Track Regulatory changes and incorporate the same

Back Office:

The Back Office is the data centre of the treasury. Without proper data integrity, the hedging can turn futile. This makes the back office a very integral part of the Treasury. The back office shall collect the exposures from the various user departments and assimilate it in the format mentioned in the MIS, the back office shall provide the front office with the MIS reports on a **weekly / fortnightly basis** which would enable them to take decisions and act accordingly. The back office personnel shall co-ordinate between the user departments and perform the following functions:

- Data assimilation
- MIS Updation as per data collected from user departments.
- MIS Reporting
- Recording of deals executed
- Reconciliation of deals executed by the Front office Desk
- Monitoring of MTM positions and reporting the same to various levels of Management at predefined intervals.





NFCL shall undertake Forex audit on annual intervals. Such an audit shall be performed by an external party / the internal audit department of the company or any person of repute and skills to assess Forex transactions under the direct supervision of the CFO. The scope of such an audit exercise shall be as under:

- Ensure that all the guideline as enunciated in the Forex Policy are adhered with by the respective departments while execution of Forex transactions.
- Ensure that none of the authorized personnel exceed their limits as quantified in this document.
- Ensure proper documentation of deals have been entered.
- Ensure that in event of any action of the treasury department deviating from the risk management policy, necessary ratification / approval from appropriate authority is provided against the same.
- Verify the accuracy of MIS generated for the management.





Section E

Monitoring, Reporting & Control

Monitoring & Revaluation:

Monitoring of the hedged positions would be done on an ongoing basis. Once the hedge is initiated the same would be monitored based on MTM valuations given by the bank or by any reputed independent valuer. Every hedged transaction undertaken by NFCL would be monitored on a monthly basis for MTM obligations. In case of any exceptional volatility resulting in a MTM movement by over ___ on a period on period basis, it would necessitate closer monitoring of the transaction and MTM valuation on a weekly basis. Certified MTM Statement of all hedged transactions undertaken by NFCL would be reviewed by the CFO once every month. Such a Certified MTM statement may be obtained from any independent agency as approved by the Board of Directors / FRMC.

Reporting & Control:

A system of enforcing checks and controls on the risk management process are essential to ensure the continuing success of the treasury function. The first step towards the same would be to set up a Forex Risk Management Committee (FRMC).

a) Forex Risk Management Committee

A Forex Risk Management Committee should be set up for reviewing the treasury and forex operations.

The set up of the Forex Risk Management Committee (FRMC) would comprise of the following members: -

- Sr. Advisor
- Chief Financial Officer
- Sr. General Manager
- External Consultant

This committee should also include any other management personnel whom the top management will nominate for this purpose.

This committee would be formed with the following objectives:

- Review exposure statements.
- Review Stop Loss levels and Take Profit Levels.
- Review Core Cover strategy.
- Authorize new instruments/products to be used for hedging.
- Reporting of MTM valuations
- Review the authorized limits
- Define the levels for which specific authorizations would be mandatory.





The FRMC shall meet on a monthly basis for the first six months and post that on a bi-monthly basis.

b) Reporting to Board

One of the responsibilities of the Board of Directors is to periodically review the significant risks and opportunities that may affect the company and its business, and to oversee the actions, systems, and controls that have been put in place to manage and monitor these risks and opportunities.

The FRMC shall report to the Board of Directors on a quarterly basis on the following aspects:

- Overall Treasury Performance
- Regulatory Compliance Report

c) Exception Reporting

In between the reporting period, the Mid Office personnel would be required to report to FRMC in case of any substantial divergence in the aforementioned MTM positions. Further, non adherence with respect to any terms mentioned in the policy will also be reported to the CFO.

Review: The forex risk management policy shall be reviewed annually. Incase of any major regulatory change or macroeconomic change in business the same shall be addressed immediately.





Accounting

Accounting is the art of recording transactions in the best manner possible, so as to enable the reader to arrive at judgments or come to conclusions. Hence, proper accounting of the any derivative structures is of paramount importance.

Accounting Treatment & Disclosure:

As per the Companies Act, 1956 and with reference to various guidelines issued by RBI, the company is required to follow the accounting standards issued by ICAI. Currently, the accounting standards applicable to companies exposed to foreign currency risk are:

- AS 11 (Accounting for effects of changes in foreign exchange rates)
- AS 30 (Financial Instruments: Recognition and Measurement)
- AS 31 (Financial Instruments: Presentation)
- AS 32 (Financial Instruments: Disclosures)

AS 11 is mandatory for all corporate with limited revision if AS 30-32 are applicable

AS 30-32 will apply to companies other than Insurance companies, Banking companies and Non-Banking finance companies in the following 3 phases:

Phase I:-

- NSE-Nifty 50 and BSE-Sensex 30 companies
- Companies listed in overseas stock exchanges
- Companies with net worth above Rs. 1000 crore

Date of applicability: 1st April, 2011

Phase II:-Companies whether listed or not having a net worth exceeding Rs. 500 crore but not above Rs. 1,000 crore.

Date of applicability: 1st April, 2013

Phase III: - Listed companies having a net worth of Rs. 500 crore or less

Date of applicability: 1st April, 2014

Keeping in view the above parameters and in order to comply with statutory requirement, NFCL shall follow AS 30-32.



