THE ROLE OF RESPONSIBILITY AND AUTHORITY IN IMPLEMENTING QUALITY MANAGEMENT SYSTEM - A CASE STUDY OF STEEL PLANT

JHUMA SAHA

Research Scholar – Ph. D. (Management Program), Faculty, MSMSR, MATS University, Raipur, Chhattisgarh, India.

Abstract: In this dynamic world, organizations are balancing the effort of individual within its domain with the interest of its stakeholders. Success of any organization has got evident focus on delegation process. Delegation is a managerial process of getting things done through others by means of giving them responsibility. All vital decisions are taken at top level of management hierarchy. Board of director delegates its power to Chief Executive of the company for the execution of responsibility. Chief Executive of the company assigns the job to departmental heads, who in turn delegate these authorities and responsibilities to their subordinates. This practice goes to the shop floor, where actual execution of work took places. In a growth oriented organization person with responsibility for a particular work required to be endowed with requisite authority for getting the job done. This process of delegation ensures the management with attainment of desired organizational goals efficiently and effectively. In this competitive environment, the quality of product and quality of services are vital for growth and survival of industry. Implementation of the quality management system provides strong foundation for the success of quality mission and quality control objectives of individual units. It is well known facts that -quality matters in all respect and every walk of life. So, implementation of system for the quality management needs unambiguous delegation. For this study Steel industry has been chosen. Rapid rise in production has resulted in India becoming the Third largest producer of crude steel. This article is all about study of delegation i.e. responsibility and authority required for effective implementation of quality management system.

Keywords: **Delegation, Responsibility, Authority, Steel, Quality, Quality Management System, ISO 9001.**

I. INTRODUCTION

Administration is the process of coordinating and facilitating the work of people in organizations. People; formally and informally organize themselves as members of different organizations in a polity. As Pfiffner and Sherwood put it, "here is where the basic values of the organization are involved; and here is where the struggle for control, power and authority is at its lowest." Therefore, it is of paramount importance to study the concepts of authority and responsibility to understand the administrative dynamics and processes in organizations (Pfiffner & Sherwood, 1960). The modem thinking about management professional is that the ultimate control is internal. It is a feeling of self-responsibility in a person. Authority and responsibility are integral parts of the process of administration. The main sources of authority are, law, tradition and delegation. The principle of responsibility acts as a control on the abuse of authority. Responsibility is of three types, viz., political, institutional and professional. The growth of professional responsibility is a healthy sign of growth and development (IGNOU |egyankosh, 2018).

Span of Control is one of the important principles of management. Progressive organization keeps ceiling on number of person or subordinates reporting to supervisor or head of the department. When the number of subordinates increases beyond the limit, supervisor required to delegate his powers to others who perform supervision for him. Now a days getting work done is not remain the only criteria to evaluate a managers ability and performance, it is now judged by the work he gets done through others. Assignment of duties, responsibility, authority and accountability to subordinates plays a vital role to ensure the achievement of desired organizational goals by implementing quality management system. Delegation is the term used to identify this process (Prasad, 1997). Top management has established the roles, responsibilities and authorities for relevant position of the organization through the human resources management. The responsibilities and authority for individual positions are clearly and elaborately written in the job descriptions. Although responsibilities, authorities and communication were also a requirement under the ISO 9001:2008 release, there are some important changes in the ISO 9001:2015 version of the standard widely know as Quality Management System. Importantly, responsibilities and authorities must now not only be assigned and communicated – top management must now also ensure that there are processes in place to make sure they are also understood (ISO, 2015).

II. LITERATURE REVIEW

Delegation

Louis Allen has defined delegation as the entrustment of a part of the work, or responsibility and authority to another and the creation of accountability for performance (Allen, 1958). Responsibility is the work assigned to a position. Authority is the sum of powers and rights entrusted to make possible the performance of the work delegated. Accountability is the obligation to carry out responsibility and exercise authority in terms of performance standards established. It is the obligation of an individual to render an account of the fulfillment of his responsibilities to the boss to whom he reports. Delegation could be characterized as the assignment of authority to subordinates in a defined area and making them responsible for the results. Delegation takes place when a manager grants some of his powers to subordinates. Delegation involves three elements: 1. **Assignment of Responsibility**: It is the description of the role assigned to the managerial staff and subsequently to subordinates. Duties in terms of functions or tasks to be performed constitute the basis of delegation process. 2. **Grant of Authority**: The delegator grants authority to the subordinates so that the assigned task is accomplished. The delegation of responsibility without authority is meaningless. The subordinate can only accomplish the work when he has the authority required for completing that task. Authority is derived from responsibility. It is the power, to order or command, delegated from superior,

to enable the subordinate to discharge his responsibility. 3. **Creation of Accountability:** Accountability is the obligation of a subordinate to perform the duties assigned to him. The delegation creates an obligation on the subordinate to accomplish the task assigned to him by the superior. The downward flow of authority and upward flow of accountability must have parity at each position of management hierarchy (egyankosh, 2018).

Responsibility

It is the state or fact of having a duty to deal with something or of having control over someone. It is the state or fact of being accountable for something (Oxford-Dictionaries, 2018). This is the duty and ability to act in response. Responsibility is the duty to which a person is bound by reason of his status or task. Such responsibility implies compliance with directives of the person making the initial delegation (Hurley, 1980). Terry has defined responsibility as the obligation of an individual to carry out assigned activities to the best of his ability (Terry, 1978).

Viewed internally with respect to the enterprise, responsibility may be defined as the obligation of a subordinate, to whom a duty has been assigned, to perform the duty. The essence of responsibility is then, obligation Responsibility arises from the superior-subordinate relationship. Responsibility may be continuing obligation, or it may be discharged by a single action and may not arise again. One of the basic principles of management is the 'parity of authority and responsibility.' This principle states that in delegating managers must match the responsibility of subordinates with the grant of commensurate authority. It should also be noted with care that responsibility cannot be delegated or shifted to the subordinates. The manager can delegate to a subordinate the authority to perform and accomplish a specific job. Manager may delegate authority to subordinate, but a superior cannot delegate any of his responsibility (Agrawal & Dayal, 2003).

Authority

Prettiest definition of authority is "the power or right to give orders, make decisions, and enforce obedience." It is the power to influence others, especially because of one's recognized knowledge about something (Oxford-dictionaries, 2018). Authority is the right to act, responsibility the obligation to carry out delegated authority; and accountability established reliability for the proper discharge of duties delegated to the subordinates. Responsibility and accountability may seem similar, but they are different (Robbins, 1978). Authority is the basis for responsibility and the binding force in organization. The process of organizing encompasses a grouping of activities for purposes of management and specification of authority relationship between superiors and subordinates and horizontally between manager. Consequently, there are authority and responsibility relationships in all undertakings where the superior subordinate link exists. Co-ordinations is the all-inclusive principle of organization and finds its foundation in authority, the supreme coordinating power (Agrawal & Dayal, 2003). In steel plant under study the board of directors has the highest level of authority. It makes individual with ability to make decisions regarding day to day affairs. Classically, authority is specified to managers and the top personnel in a company to help them guide a team and achieve organizational goals and objectives. It enables a manager to hand over work and give instructions to their workers, who acknowledge it because of the initiator's authority to formulate those decisions.

Accountability

Splitting this word accountability in its two parts as account + ability will provide literary meaning. As defined in oxford dictionary-account is a "report or description of an event or experience" and ability is the "possession of the means or skill to do something." Therefore combined 'Accountability' is literally the ability to report on events or experiences. This is the responsibility to monitor, i.e. to count (Oxford-Dictionay, 2018). It refers to an individual's sense of duty to 'answer' for the responsibility they've been agreed upon.

Quality and Quality Management System

Joseph Juran states quality as "fitness for use", it evaluate how well the product performs for its intended use. The ideas of quality differently focus on how to distinguish certain kinds of qualities from one another. Conventional definition of quality describe a quality item as one that wears well, is well constructed and will last for a long time (Juran, 1998). To Crosby, quality means "conformance to requirements." Quality must be defined in measurable and clearly stated terms to help the organization take action based on tangible targets, rather than bunch, experience, or opinions. To Crosby, quality is either present or not present. There is no such thing as differing levels of quality (Crosby, 1979). Deming asserts that the quality of any product or service can only be defined by the customer. Quality is a relative term that will change in meaning depending on the customer's needs. Quality should be aimed at the need of the customer, present and future. To meet or exceed the customer's needs, managers must understand the importance of consumer research, statistical theory, statistical thinking, and the application of statistical methods to processes (Deming, 1986).

ISO: International Organization for Standardization is a worldwide federation of national standards bodies. It's engaged in preparing International Standards. This International Standard can be used by internal and external parties. This International Standard aimed at providing- (a) uniformity in the structure of different quality management systems; (b) alignment of documentation to the clause structure of this International Standard; and (c) the use of the specific terminology of this International Standard within the organization. The quality management system requirements specified in this International Standard are complementary to requirements for products and services. This International Standard is based on the quality management principles described in ISO 9000. The quality management principles includes 1) Customer focus; 2) Leadership; 3) Engagement of people; 4) Process approach; 5) Improvement; evidence-based decision making, and 6) Relationship management.

ISO 9001:2015 specifies requirements for a quality management system (QMS), when an organization: a) Needs to demonstrate its ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements, and b) Aims to enhance customer satisfaction through the effective application of the system, including processes for improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements. Fundamental aspect associated with the planning, for how to achieve the quality objectives, determine: what will be done, what resources will be required, who will be responsible, when it will be completed, how the results will be evaluated (ISO, 2018).

Importance of implementation

For the deployment of QMS, it is the necessary on the part of top management to establish the organizational hierarchy for effective delegation. Additionally, it should ensure that duties, responsibilities and authorities of all human resources are defined and communicated. Employees should be clear on their duties, responsibilities and authority in meeting customer requirements. Top management uses its organizational chart to define and document this responsibilities and duties. Communication of the deployed system throughout the organization is the corner stone for the success of implementation. Training on procedures and work instructions is the best ways in accomplishing the objective of QMS. Organizations hierarchy, line and staff relationship provides clear road map for communication. Responsibility for the department head may be established by top management and subsequently the responsibilities and authorities for the rest of the organization may be established by the process owners. Successful planning, documentation of procedure, control of documents and internal communication processes are the performance indicators for effective implementation.

III. STEEL INDUSTRY IN INDIA

India is the third largest producer of crude steel in 2015 as well as in 2016. The country was the largest producer of sponge iron or DRI in the world during the period 2003-2015 and emerged as the Second largest global producer of DRI in 2016 (after Iran). India is also the 3rd largest finished steel consumer in the world and maintained this status in 2016. In a de-regulated, liberalized economic/market scenario like India the Government's role is that of a facilitator which lays down the policy guidelines and establishes the institutional mechanism/structure for creating conducive environment for improving efficiency and performance of the steel sector. In this role, the Government has released the National Steel Policy 2017, which has laid down the broad roadmap for encouraging long term growth for the Indian steel industry, both on demand and supply sides, by 2030-31. This policy seeks to accomplish PM's vision of 'Make in India' with objective of nation building and encourage domestic manufacturing and is applicable on all government tenders where price bid is yet to be opened. In order to provide flexibility, Ministry of Steel may review specified steel products and the minimum value addition criterion (GOI, 2018).

IV. MAKING OF STEEL; From Iron Ore to Steel

Now a days manufacturing of steel from Sponge Iron/Pig Iron/ Heavy Metal scrap and direct casting is one of the most energy efficient, resource saving, environment friendly process as compared to other steel making process. Power being one of the main cost inputs for the commissioned steel plant, it will play a vital role in the overall cost of steel production. Therefore, considering power generation potential of by product gases, Char and Dolochar which will more or less meet the entire power requirement of steel plant. Brief of the process of steel making in plant under study is as per the details below.

Sponge Iron: The principal raw material used for production of sponge iron process are iron oxide lump ore, non-coking coal and lime stone/dolomite. Sponge Iron is the metallic form of iron produced from reduction of iron oxide below the fusion temperature of iron ore (1535 ° C) by utilizing hydrocarbon gases or carbonaceous fuels as coal. The oxygen & Sulfur present in the Iron Ore is removed in form of CO, SO_2 & CO_2. The reduced product having high degree of metallization exhibits 'honeycomb structure' due to which it is named as sponge iron. Iron is continuously fed into the Kiln along with Coal, which has dual role of fuel as well as reluctant. Small quantities of lime stone/ dolomite are added to scavenge the Sulfur from the Coal. As the iron ore is in direct contact with the reducing agent through – out the reduction process, it is often termed as direct reduced iron (DRI). Under this process, a refractory lined Rotary Kiln of is used for reduction of iron ore in solid state. As the Kiln Rotates, the lining transfers the heat to the charge. Charge material, pre-heated to about 1000°C enters the reduction zone, which is the approximate temperature for solid- state reduction of iron oxide to metallic iron. The reduction product is discharged into a rotary cooler along with coal ash, cachinnated limestone and residual char. The Product is than screened and magnetically classified (HPSL, 2018).

Power Generation: The waste gas produced from the Kiln process is extracted from the feed end of the Kiln i.e. after burning chamber. This gas is at a high temperature and also contains some remaining volatiles. These are brunt to remove the carbon monoxide and hydrocarbon, which further increase the temperature of the gas, than the gas passes through waste Heat Recovery Boiler to generate the high – pressure steam to produce electricity. The steam will be passed through Turbine Generator to generate electricity by using waste heat contained in the waste flue gases released from ABCs (After Burning Chamber) from DRI sponge iron kilns. It provides better energy efficiency, achieve sustainable development in the industry and improve the working environment of Sponge Iron-making process. The power so generated shall be used to meet the captive power requirement of Plant itself (HPSL, 2018).

Induction Furnace (Steel Melting shop): The raw material (Sponge Iron, Iron-scrap, and Pig Iron) is charged in the Induction Furnace crucible and then electricity is induced due to which the material melts. Slag is removed manually. The carbon input is provided to compensate carbon loss for this CPC- Calcined Petroleum Coke is normally used. Molten Metal is poured into laddle, the liquid metal is then transferred to CCM for continuous casting. CCM unit produces Billets or Blooms as per customer's requirements (HPSL, 2018).

Hot Charge Rolling Mill: Raw Material i.e. Red Hot Billet coming from CCM in red hot condition is cut either by Gas Cutting or automatic hot billet Shearing Machine. After the Billet is cut into required length, it is pushed out to rolling stands for re-rolling. Steel Pieces are rolled through all stands in order to get required shape of finished goods i.e. Angle/Channel/Bar/Rod/Structure and other rerolled products. Thermo Mechanically Treated Bars are made of a newer variety of steel solely used for construction purpose. The stages of rolling operation are comprised of heating of feed stock to rollable temperature, rolling the feeding stock in different mill stands, cropping the hot bar during the process of rolling between mill stands as applicable and subsequently finishing in form of hot rolled deformed bar in straight length. The hot bar coming out of the last pass is then conveyed through TMT lines and collecting in a cool bed after shearing. TMT bars are manufactured using the 'Quenching & Tempering' (Q & T) technology. TMT bars get its strength properties from quenching and tempering. No mechanical treatment is involved in TMT Bars (HPSL, 2018).

V. DOCUMENTING ROLES AND RESPONSIBILITIES ACCORDING TO ISO 9001

ISO 9001:2015 Clause 5.3 explains, Organizational roles, responsibilities and authorities as –top management are required to assign the responsibility and authority to: 1) Ensure that the management system meets the requirements of ISO 9001:2015, 2) Ensure that the processes are delivering their intended outputs by means of monitoring of KPIs, 3) Report on the performance of the quality management

system and on opportunities for improvement in particular to top management, 4) Ensure the promotion of customer focus at all levels, 5) Ensure that the integrity of the management system is maintained when changes to the system are planned and implemented (Barker, 2018).

When implementing ISO 9001:2015, organization will want to find a way to document the roles and responsibilities for its Quality Management System (QMS). It includes- A) **Responsibility for QMS conformance** – this is extremely important in the beginning, when organization plans its processes and put them in place. While implementing its QMS, for instance, it might be easier to close a corrective action without checking that it was effective, but this is an important requirement of ISO 9001:2015. B) **Process conformance** – who is going to ensure that the organizational processes give the outputs that they are intended to provide? This is very often done with the assignment of process owners who identify key performance indicators, often called KPIs, which will tell them if the process is working as expected. C) **QMS performance reporting** – it is a requirement of the management review to look at the performance of the QMS, but who will gather the information and report on it? This also includes reporting such as posting information for employees to know how well their processes are doing. D) **Promote customer focus** – customer focus is an important part of ISO 9001, and someone needs to be responsible for making sure that everyone understands this importance, as well as how they affect customer satisfaction. The above responsibilities for QMS roles need not only to be assigned, but also communicated and understood in your company.

One of the easiest ways to ensure this is to document the roles and responsibilities and ensure that everyone understands the information that is written. Some methods that could be practiced are: **Consolidated documentation** – means, to have one document for roles and responsibilities, which includes all of the QMS roles, responsibilities, and authorities. This method is very good for documenting the top-level roles and responsibilities, such as the process owners for each of your processes. **Dispersed documentation** – here, company may put the roles and responsibilities into each document that it has for its processes. If someone is reading the procedure to find out what needs to be done, they can easily see what their role and responsibility is within the process, as well as who else has responsibilities that need to be met (Hammar, 2018).

VI. RESPONSIBILITY AND AUTHORITY FOR QMS IN STEEL PLANT UNDER STUDY

The topic under study is steel manufacturing unit, here director, in consultation with COO is overall responsible for the effective planning of QMS. Criteria considered as Input to planning are- a) Quality Policy and Objectives. b) Customer needs/expectations/feedback. c) Perceived opportunities and threats. Based on these parameters worked out are: a) Budgetary and resource needs or up gradations of existing resources. b) Further skill, expertise, training needs, c) Monitoring and measurements enhancements. The responsibilities and authorities for various processes are clearly defined in the current version of Quality Manual and Procedure Manual is communicated within the organization. All concerned persons are authorized to take appropriate actions for fulfillment of designated responsibilities to them, with due consent from Director about their actions to be taken for fulfillment of responsibilities assigned. Management ensures that responsibility and authorities are commensurate with the scope of each job title. The organization under study is steel and power industry. The job title for the implementation of quality Management System are – director, management representative, general manager (Steel Production, Power, HR) as well as Manager of QC, Purchase, Marketing, Sales, Out sourced process, Dispatch and Maintenance dept (HPSL, 2018).

Table 1: Responsibility and authority for the Job titles in Steel Plant

Job Title	Responsibility	Authority
Director	Director of the company is responsible • for overall implementation of the company's Quality Policy and monitoring all activities of the company. • for expansion and diversification activities of the company for implementation. • for providing required resources. • to appoint Management Representative. • for evaluating the Quality System from time to time. • for providing necessary training to various level of employees where required. • to control financial activity and execution of all new projects. for contract review and for handling customer complaint. • for marketing activity in the absence of Marketing Manager. to take corrective & preventive action. to identify statistical techniques, for the all product development work including identification of new product and for purchase related activities.	• to approve the Quality Policy, Quality Manual, Quality Objectives& Quality System Procedure of the company. • for overall implementation of Company's Quality Policy and Monitoring of all activities of the Company. • for overall implementation of expansion and diversification activities of the Company. • for providing required resources. • to appoint the Management Representative. • to control financial activities. • to take decision on financial matters. • for all product developments work including identification of new product. • to take corrective and preventive action against NCR's identified. • to identify statistical techniques. • to make purchase.
Management representative	• MR is Responsible • for establishment and implementation for Quality System in accordance with ISO 9001: 15 and co-ordination with consultants, certification body and other external agencies. • for planning, conducting, organizing and reviewing internal quality audits. for document and data control and for reporting to management about the performance to the quality system.	• Authorized for establishment and implementation of Quality System in accordance to ISO 9001: 2015. • Authorized for organizing Internal Quality Audits and Management Review Meetings.

	• for reporting to management about the performance of the quality system. • for co-ordination of Management Review Meetings and circulating MRM reports to every concerned for effective implementation and monitoring the effectiveness of actions implemented.	
GM (Production-Sponge Iron)	• for procurement, planning and control. • for manpower planning and for implementing, inspection and test status of the material/ product at the supplier end. • for all activities related to production and for carrying out corrective & preventive actions.	• Authorized for all activities related to production.
GM (Power)	• Generation of power for captive use as per requirement. Synchronization and co-ordination with power grid for cascading surplus power generated • All legal and statutory requirements related to safety, environment and quality during generation, use and synchronization of power. TG & boiler maintenance work installed within power plant	• Authorized for all activities related to generation and use of power as well synchronization with power grid.
Manager (Purchase)	• for carrying out the tasks entrusted to him by directors for implementation of same. • for control of inspection, measuring and test equipment at supplier's end. • for purchase activities, handling non-conforming, evaluating the quality system from time to time. • for providing necessary training where required, for contract review & for customer complaints, to take corrective & preventive actions.	• for carrying out duties and implementation of tasks entrusted to him by the Director for purchase. • to take necessary action to avoid the non-conforming products. • for overall implementation of expansion and diversification activities of the Company. • to take corrective & preventive actions.
Manager (Quality control)	• Responsible for control of inspection, measuring and test equipments at the supplier end as well as inside the QC lab of the organization. • Responsible for releasing specification for the procurement. • Responsible for incoming, in-process & final inspection activities.	• to take necessary action to stop non-conforming product • to incoming, in-process & final inspection activities. • to carry out Corrective & Preventive action.
Manager (Marketing)	• for contract review and marketing related activity. for getting customer feedback to achieve customer satisfaction. Responsible for handling customer complaint. • for co-ordination with projects for timely delivery.	• for contract review and marketing related activities. • for getting customer feed back and to achieve customer satisfaction. • for handling customer complaints.
GM (HR)	• Identification and administering of training needs for staff and executives. • Arranging and scheduling on-job and external training programmes as identified. • Induction training of newly appointed staff for the quality policy, so that they are involved and understand the concepts of quality, and specific company objectives; • Preparing annual training calendar and maintaining record of such trainings (both in-house and offsite) including monitoring of effectiveness, competency mapping. • Maintaining employee information and related documentation.	• for planning, conducting gap analysis, making competency matrix, conducting training and reviewing effectiveness of trainings imparted. • for human resource management, advertisement, recruitment and placements of employees at various levels. • to plan and implement programs for skill development of employees. • to conduct Employee Satisfaction Survey from time to time.
Manager (marketing)	• Collecting information as regards requirement of steel products in quantity and quality through tender advertisements in newspapers, emails, client's websites or through visit of sales personnel, • Follow-up of offers submitted for realization of orders, • Reviewing raw material availability, workforce availability and adequacy of other resources available in the organization prior to making any delivery commitments to customer to maintain the customer satisfaction.	• Submission of offer as appropriate to the intent through suitable mode and maintain the records of such offers submitted, • Techno-commercial negotiations, price negotiations prior to offering final discounts, • Review of orders received and aligning the same with production planning.

Manager (Electrical/ Mechanical maintenance)	• Preparing shutdown maintenance schedule (plan) and preventive maintenance schedule for various electro-mechanical equipments, • Obtaining consent from Chief Operating Officer to undergo required shutdown maintenance and communicating the same to all other process owners, • Preparing spares/consumables requirement in advance and communicating the same to stores/purchase department to initiate the procurement, • Maintain record of every breakdown maintenance, corrections done, corrective and preventive actions taken afterwards to avoid the recurrence of such premature failures,	• Inspection and approval of purchased spares/consumables to check its adequacy prior to use, • Imparting induction training and on-job training to trainee apprentices about use and maintenance of such equipments, effectiveness monitoring of such trainings imparted, ensuring the safe removal and disposal of worn out ring, bearing, nut-bolt, oil seal, broken parts, used grease, used oil and other ferrous/non-ferrous materials after maintenance is over.
Laboratory In charge	• For Random sampling of every lot of raw material and finished goods in required quantity from such lots to ensure the appropriateness of samples obtained, • Performing all the chemical and physical analysis of such samples and maintaining the records of results obtained thereof required to ascertain the quality of such raw materials or finished goods as per customer requirement, • Ensuring that only calibrated measuring instruments are being used in the laboratory as an essential control procedures, • Ensuring that all the test procedures are available in the laboratory, relevant IS codes and other standards required for testing of raw material as well as finished goods manufactured by the organization,	• Issuance of test certificates/reports as per customer's preference, • Reviewing and maintaining housekeeping and storage requirements for glassware, chemicals, apparatus and other amenities in laboratory,
Manager (outsourced processes)	• The incharge of outsourced process is thus responsible for following: • Regular check-up of materials being used (electrodes, paints etc.) by sub-con during denting & painting work. • Review of Reworks/repeat complaints noticed in the services received from outsourced contractors. In such events, their contract is suspended immediately and is restored after review of entire work performed by them.	• Periodic evaluation of vendors and sub-cons for the continual improvement and effectiveness in respect of cost compliances, time compliance and quality of work carried out by them. • Review of compliance of statutory and regulatory requirements by outsourced vendors/contractors against the jobs awarded to them. • Maintaining contract records and review records
Manager (dispatch)	• Identify the adequate space to stock the incoming raw material, • Allocate the space to stock the incoming raw material and communicate the same to lorry driver, • Supervise the sampling done for laboratory test of incoming raw material, • Stocking the raw material at allocated place and ensure that traceability requirement of different grade and size of raw material is maintained, • Ensure that environmental changes does not affect the quality of raw material or finished goods, • Physical verification of entire lot of material available inside the organization quarterly and maintain the records thereof, • Maintaining records of receipt and dispatch & review all such records periodically during physical verification of stock,	• Review of compliance of statutory and regulatory requirements by vendors/transport contractors against the raw materials supplied by them. • Allocate the space to stock the finished goods duly bundled, marked with identification and traceability and quantity measurement for every lot, • Supervise the lifting of finished goods by lorry driver at the time of dispatch and verify the same with the bill/challan raised, • Define retention period of raw material and finished goods and ensure that the same are used/dispatched well within time, • Ensure that FIFO (First-In-First-Out) system is followed.

Source: Quality Management System, Manual, (HPSL, 2018)

VII. RESPONSIBILITY & AUTHORITY MATRIX IN STEEL PLANT UNDER STUDY

The responsibility and authority matrix is a tool for empowerment and role clarification. The word "empowerment" raises many feelings to those who hear it. For some, their eyes light up and extol the virtues of giving power to the workers. Others, however, shake their heads, roll their eyes and say that the term is meaningless. This matrix is a critical supplement, if not a replacement, for the traditional job description and organizational chart. One advantage is that it focuses on decision-making rather than static activities. Another advantage

is that it presents in graphical format the relationships between people and functions. This matrix supports the movement away from individual, isolated work to a more coordinated, team-based environment (Organized Change Consultancy, 2018).

For this study selected processes or functions of the steel manufacturing unit has been chosen and specific responsibility for each process has been studied. At the same time implementation and review phase has been examined through documentary evidence. Quality objectives are set for steel making unit with rolling mill, induction furnace, power plant and sponge iron divisions. The responsibilities and authorities for various processes owners are clearly defined in the current version of Quality Manual and it is communicated within the organization. Top management and all concerned employees/process owners are authorised to take appropriate actions for fulfilment of designated responsibilities to them for fulfilment of responsibilities assigned. Through routine meetings, process owners inform management representative about actions taken and status of implementation and subsequently they commit the time-line for implementation schedule/ completions (HPSL, 2018). Here is the tabular form of the responsibility and authority set for some of the selected process in steel making industry.

Table 2: Responsibility and authority matrix of selected process in steel Plant

Clause of ISO 9001 : 2015 System Document	Processes (functions)										
	Chief Operating Officer	Plant Head	Raw Material Purchase	Production	Receipt/ dispatch	Stores & Purchase	Electro-mechanical maintenance	Sales & Marketing	HR & Training	Mgmt Process	Outsourced Processes
General Requirements	X	X	X	X	X	X	X	X	X	X	X
Documentation Requirements	X	X	X	X	X	X	X	X	X	X	X
Quality Manual	X	X	X	X	X	X	X	X	X	X	X
Control of Documents	X	X	X	X	X	X	X	X	X	X	X
Control of Records	X	X	X	X	X	X	X	X	X	X	X
Management Commitment	X	X								X	
Customer Focus		X	X	X				X		X	
Quality Policy	X	X	X	X	X	X	X	X	X	X	X
Quality Objectives	X	X	X	X	X	X	X	X	X	X	X
Quality Mgmt System Planning										X	
Responsibility & authority	X	X	X	X	X	X	X	X	X	X	X
Management Representative										X	
Internal Communication	X			X	X	X	X				
Management Review	X	X	X	X	X	X	X	X	X	X	X
Review Input	X	X	X	X	X	X	X		X	X	
Review Output	X	X	X	X	X	X	X	X	X	X	X
Provision of Resources			X	X			X		X		
Human Resources	X								X	X	
Infrastructure	X	X									
Work Environment	X	X		X							
Product Realization		X	X	X	X	X	X	X	X		X
Customer requirement		X		X	X			X		X	
Review of Customer requirement	X	X									
Customer Communication	X									X	
Purchasing			X		X	X					
Production & Service Provision		X		X							
Validation of Service Provision	X									X	
Identification & Traceability			X	X	X	X					
Preservation of Product			X	X	X	X					
Monitoring & Measuring Inst.			X	X	X	X	X				X
Measurement, Analysis				X		X	X				X
Customer Satisfaction	X	X	X							X	
Internal Audit	X	X	X	X	X	X	X	X	X	X	X
Measurement of Processes		X	X							X	
Measurement of Product			X								
Control of NC product	X	X	X	X	X	X	X	X	X	X	X
Analysis of Data	X	X	X	X	X	X	X	X	X	X	X
Continual Improvement	X	X	X	X	X	X	X	X	X	X	X
Corrective Action	X	X	X	X	X	X	X	X	X	X	X
Preventive Action	X	X	X	X	X	X	X	X	X	X	X

Source: Quality Management System, Manual, (HPSL, 2018)

VIII. CONCLUSION

Delegation of authority is one of the most important factors in the process of organizing. It is essential to the existence of organization. Assignment of activities to various managers creates responsibility and in order to carry out these responsibilities, managers need appropriate authority. In growth oriented system such as steel industries, most of the people have some level of responsibility in the world of work. It may be responsibility for the functioning of a particular piece of equipment at shop floor or for delivering customer service to the community at large. Transformation of objectives into accomplishment is imperative for the continual improvement of any organization. When quality is coupled with the product or services the organization wanted to offer, it must pursue the quality management system in practice. For the implementation of quality management system managers as well as top managers have to be proactive.

Study of quality management system under study and several items and clause of ISO 9001:2015 standard emphasizes on word 'ensure...' which need justification from the top management. Top management maintains oversight of these points even if the responsibility has been delegated. Direction set by the top management determines the structure or system in which the organizational processes operate. Communicating the significance of the Quality Management System within the organization, creating climate for the implementations, engaging and supporting people to contribute for the QMS, ensures customer satisfaction and also fulfills legal requirements. Study reveals that the top management ensures that the process contains the required resources to produce fruitful outputs and meet customer requirements as a part of continual improvement. Hence the roles and responsibility of Top Management for the QMS is apparent. This study has given enough atmospheres to understand the responsibility and authority in an organization. Responsibility gives us shadow throughout our life.

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