OMC Quality Circle Manual: Working Guidelines for QC Members
## Document review and approval

### Document History

<table>
<thead>
<tr>
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<tbody>
<tr>
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Glossary

I. **Apex Committee (AC):** Committee consisting of the Managing Director and all functional Directors, chaired by the Managing Director, for SaHbhagita

II. **Benefits:** Savings accrued to OMC within 6 months from the date of completion of project implementation, arising due to implementation of the project in consideration. Benefits = Value Realized minus Project Cost

III. **Business Excellence (BE):** BE means deploying outstanding practices, through CIP, in managing the organization in order to achieve the best results

IV. **Cross Functional Team (CFT):** Committee consisting of all sectional heads at HO and Management Representative of BE/ CIP program, chaired by CGM (Finance), for SaHbhagita

V. **Continuous Improvement Program (CIP):** CIP is an OMC initiative to incubate a culture of improvement among its employees through a structured methodology

VI. **Facilitators:** Representatives who would guide the workings of QCs in their regions. PTLs would act as the Facilitators for QCs

VII. **Guna Sampurna Puraskar:** OMC-level QC competition wherein the SC decides the best 3 QC projects implemented in OMC, twice a year

VIII. **High-Value Project:** Improvement project taken up by QC whose expected benefit is more than INR 1 crore. A QCU is expected to do a minimum number of improvement projects in a financial year, as decided by Steering Committee during the start of the year

IX. **Management Representative (MR):** Executive nominated by the management to convene CFT meetings, and co-ordinate with QCUs and QCs. He/ she will be the single point of contact for the purpose of implementation of SaHbhagita, QC projects & overall BE/ CIP program

X. **Project Cost:** Cost incurred by OMC in executing the project including Manpower cost, Material cost, Machinery cost and cost of Capital

XI. **Project Evaluation Framework:** Framework used by QCU to evaluate top 3 projects from each mines, twice in a year. These top 3 projects will qualify for OMC-level QC competition, Guna Sampurna Puraskar

XII. **Project Team Leaders (PTL):** Executives from OMC to drive the improvement initiatives at each of the site (mine site & Head Office). PTL would act as the Facilitators of QCs in their region
XIII. **Steering Committee (SC):** Committee at HO to oversee the work of QCU and QCs in OMC. Consists of MD, all Functional Directors, CGM (Mining), GM (Materials) and AGM (Production)

XIV. **Quality Circle (QC):** Team comprising of both OMC executives and non-executives, formed to work on improvement projects

XV. **Quality Circle Captain:** Leader of the Quality Circle

XVI. **Quality Circle Unit (QCU):** Composed of Regional Manager, Mines Manager(s) and Facilitators, QCU would govern the work of QCs at mines/site level

XVII. **SaHbhatita:** The Employee Suggestion Scheme (ESS) of OMC

XVIII. **Value Realized:** Value realized by OMC on account of executing the project within 6 months from the date of completion of project implementation in terms of:

   i. Difference between revenue before project implementation and revenue after project implementation

   ii. Difference between per unit cost of production before project implementation and per unit cost of production after project implementation
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1. Setting the Context

During the Perspective Planning workshop held on 7th – 8th June, 2017, embracing Business Excellence (BE) through Continuous Improvement Programs (CIP) emerged as a strategic objective of OMC. In order to achieve this objective, OMC would be conducting two parallel initiatives:

- SaHbhagita
- Quality Circles

1.1. SaHbhagita

The Employee Suggestion Scheme (ESS) of OMC has been named SaHbhagita. SaHbhagita aims to engage employees and promote their participation towards building culture of continuous improvement. Every OMC employee is free to provide their suggestions under SaHbhagita. The scheme aims to suitably acknowledge and reward the employees for their acceptable and implementable suggestions.

SaHbhagita would be administered by a 3-tier structure:
The flow of suggestions under SaHbhagita has been given in the diagram below:

Figure 2 Administration of SaHbhagita

Refer to the SaHbhagita document uploaded on OMC’s website for a detailed understanding of SaHbhagita.

1.2. Quality Circles

Quality Circles refer to specific teams, which would be created across OMC, with the objective of working on improving projects. A quality circle would finalize which improvement projects they wish to work on, analyze the reasons for the problem, and identify and implement the solutions.

Detailed information about Quality Circles has been mentioned in Clause 2 & 3 of this document.
2. Quality Circle – Introduction

2.1. What is a Quality Circle

A Quality Circle (QC) refers to a group of people, doing similar work, who meet at regular intervals to identify, analyze and solve work-related problems. QC concept is based on the premise that the workers who do the job everyday know more about the organization and its challenges than anyone else. Hence, their voluntary involvement is the best way to solve their work related problems.

It is defined as “a volunteer group composed of members who meet to talk about workplace and service improvements and make presentations to their management with their ideas.” (Prasad, L.M, 1998). QCs have the following characteristics:

a. They consist of members who volunteer to be a part of QCs, and are interested in solving work related issues
b. QCs have certain level of autonomy in their operations in the sense they have the freedom to decide which problems they should solve, how to analyze the problem, come up with solutions on their own, and implement the solutions in the workplace after taking necessary approvals
c. QCs meet at regular, pre-defined intervals. Usually, they meet once a week for an hour after work-hours
d. QCs exist to improve organizational performance
e. QCs identify areas of improvement within the organization, and present those ideas to the top management for approval to implement them
f. The tasks of QCs can be divided under three heads:
   i. Identification of problem
   ii. Suggestion formulation
   iii. Implementation of suggestion
g. QCs utilize Quality Control concepts, tools and techniques to solve business problems. They prove that a problem exists by collecting data; summarizing and analyzing the data using simple statistical tools like graphs, scatter diagrams, cause and effect diagrams, Pareto diagrams, and histograms; and using problem solving techniques like What, When, Where, Who, Why, How (5W1H) concept, 5S concept etc.
h. QC members are adequately trained in identifying, analyzing, prioritizing and solving organizational issues. They receive training in problem solving methodology, statistical quality control and group processes

1 Handbook for TQM and QCC - Inter-American Development Bank
For the QC to function effectively, top management actively encourages the formation of QCs, and extends all possible help to them.

2.2. Size of Quality Circle

A QC should be large enough to ensure adequate number of suggestions float in, and members are not overburdened with QC activities. At the same time, QC should not be so large that members don’t get an opportunity for equal participation. Ideally, a QC should have 4-10 members. The interaction between members would be a lot more enriching if the ideal QC size is maintained.

In cases where there are less than 4 members interested in being part of a QC, QC can be formed with the interested members. However, the size of the QC should be increased as and when additional members are available.

If there are more than 10 members who want to be a part of the QC, it is better to form two QCs in such cases.

2.3. Benefits of Quality Circle

- By taking up various projects, QCs solve issues related to quality, productivity, safety, defects and waste reduction, cost reduction, compliance and sustainability
- Learnings from projects done by one QC can be used to solve problems being faced by other departments or regions
- By systematically solving workplace problems, QC helps in achieving Quality Assurance
- By training the QC members in various problem solving and statistical tools, the organization builds a pool of highly skilled individuals
- Communication and presentation skills of QC members improve as they develop a habit of presenting their findings, analysis and opinions inside and outside the organization
- By competing in national and international level QC competitions, QC members become ambassadors of the organization, and broadcast the good work being done by the organization. They also get an opportunity to learn what innovations and improvements QCs are doing in other organizations, and they can apply the same in their organization
- The morale of QC members increase as they get a platform to use their skills, wisdom and creativity to solve organizational issues

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2 Handbook for TQM and QCC - Inter-American Development Bank ; Quality Circle - Govt. of Maharashtra, PWD
3 Handbook for TQM and QCC - Inter-American Development Bank
- QCs facilitate team bonding and inter and intra department interactions. Members learn interpersonal skills through their discussion with other members, acquiring a sense for building up harmonious relationships.
- It enriches the job profile of members by providing them an opportunity to learn and do something new in addition to their day-to-day job.
- QC members get a chance to interact and work with senior management which acts as a great motivator for them.
- Career progression for QC members gets easier when senior management see them voluntarily take up complex issues affecting the organization, and devising solutions to resolve those difficulties.
3. Quality Circles in OMC

3.1. Administration structure

The Quality Circle programme in OMC would be administered by a four-tier structure:

- **Quality Circle (QC)** - Quality circle team comprises of Quality Circle Captain (QCC) and Quality Circle Members (QCM). Section-wise QCs will be formed with a focus on carrying out continuous improvement projects in that section. Quality Circle will have a mix of both executives and non-executives.

- **Quality Circle Facilitator (QCF)** – At least one QCF will be designated at each mines to administer the working of quality circle team, and support them with any technical, managerial or capacity building requirements. Project Team Leaders (PTL) of BE Program will act as QCF in the initial stages.

- **Quality Circle Unit (QCU)** - Quality Circle Unit would be administrative office at each mines/ site to monitor and supervise work being done by QC teams. It would comprise of Facilitator, Mines Manager and Regional Manager.

- **Steering Committee (SC)** - Steering Committee would be a HO based committee for supervising and mentoring the Quality Circle Unit and guiding them to promote the improvement culture at mines/ site level. Quarterly review meeting will be organized by MR for Steering committee to review the progress made by each of QCU and help them address any specific challenges they are facing.
The administration structure is given below:

3.1.1. Quality Circle (QC)

QC would be composed of:

i. QC Captain - QC Leader & Convener
ii. QC members - Members

QC Captain would be the convener of QC meetings. A specified day, time and venue would be fixed wherein QC members would meet each week. Unless otherwise specified, the meeting for the QC will take place every week at the same time and location.

QCs would be formed at site and mines level, based on their area of work. The members of a particular QC would belong to the same section or department, and would have similar kind of work. For example, there may be a separate QC for mining, ore evacuation, civil, geology, finance, hospitality, forest & environment, sales etc. There can be multiple QCs in a mine. There may even be multiple QCs for a particular section, e.g. 2 QCs may be formed for civil section at a site in case more than 10 members are interested to be part of civil QC at that site.

If there are not enough members in a particular section to form a QC, they can be a part of the General QC. General QC can be comprised of people
from all those sections wherein there are not enough members to form a separate sectional QC. For example, if there are only 2 people from Medical, 1 from F&E, 2 from Personnel, they can all get together and be part of the General QC

**A. Roles and duties of QCs:**

Roles and duties of QCs have been mentioned in detail in Clause 4 of this document.

As a synopsis of their expected tasks and responsibilities, QCs would identify, implement and track success of improvement projects. They would also represent OMC in various national and international QC competitions.

### 3.1.2. Facilitator

Project Team Leaders (PTLs) have been chosen in OMC for carrying out BE/ CIP initiatives. Under QC initiatives, PTLs initially would act as Facilitators for the QCs in their respective mines. Later on, with the QC acquiring appropriate experience and skillset, additional facilitators, with support from QCU, will be selected as per the need of QC architecture.

Facilitators would assist in formation, training and working of QCs. A Facilitator may be incharge of multiple QCs in his/ her mines. However, to ensure a Facilitator is able to dedicate sufficient time to each QC, he/ she should not be made incharge of more than 5 QCs. If more than 5 QCs are formed in a region, more than 1 Facilitator should be chosen for that mines. A QC Captain, who has completed at least 6 improvement projects in a year, may be chosen as a Facilitator by the QCU.

Facilitators will perform the following roles and function:

**A. Roles and duties of Facilitator:**

- a. Facilitator will assist in the formation and registration of all QCs in their region

- b. Send request to QCU in case modifications/ additions are needed in QC composition

- c. Attend training on advanced QC tools, techniques and methodologies

- d. Train the QCs on QC tools and techniques

- e. Identify which external trainings and certifications are to be provided, and inform the QCU about the same

- f. Train the QC Captains on ways to conduct QC meetings and keep attendance, minutes, records in a properly maintained register
g. Assist QCs in getting approval for solutions implementation
h. Provide required help to QCs in solutions implementation
i. Assist QCs in business case presentation
j. Assist QCs in preparing for QC competitions
k. Lead high-value projects in their respective mines, and ensure all tasks under high-value projects are completed

3.1.3. Quality Circle Unit (QCU)

QCU would be responsible for the day-to-day management of QCs, and to implement the vision of SC with regards to QCs. It would be composed of:

i. RM - Leader
ii. Mines Manager - Member
iii. Facilitator - Member

There will be a QCU for each site and mines. To this effect, HO will also be taken as one site, and a QCU will be formed for HO. The composition for QCU at HO would be:

i. DGM (Projects) - Leader
ii. Facilitator - Member
iii. MR - Member

The QCU shall meet as often as necessary and at least twice every month. PTL would be the convener of QCU meetings. A specified day, time and venue would be fixed wherein QCU members would meet once every 2 weeks. Unless otherwise specified, the meeting for the QCU will take place once every 2 weeks at the same time and location.

A. Roles and duties of QCUs:

a. Implement the plans and policies as formulated by SC
b. Attend QC Induction training so that they are equipped with the skillset to monitor and guide the work of QCs
c. Promote the concept of QCs in their regions
d. Select QC Captains
e. Select a Facilitator in case more than 5 QCs are formed in the region
f. Approve the formation of new QCs, and modifications to existing QCs
g. Organize capability development initiatives for QC members, as per the recommendation of the Facilitator

h. Assist in promotion of BE/ CIP initiatives

i. Address issues raised by QCs

j. Keep a record of all minutes, findings, cases, analysis, presentation etc. prepared by QCs

k. Track progress of all projects under implementation

l. Provide necessary support to QCs for project implementation

m. Verify and approve the solutions implementation plan made by QCs

n. Keep a log of all improvement projects undertaken and their categorization

o. Ensure that the given number of improvement projects, including High-Value projects, as per the target set by SC every financial year

p. Obtain approval from Sectional Heads at HO before implementing any solution

q. Take the lead in identifying and implementing High-Value improvement projects in their mines

r. Calculate benefit derived from each completed High-Value improvement project, and send to Lead Auditor for their approval

s. Rewards under QC initiatives at mines level have to be administered by QCU

t. QCU to ensure monthly allowance are given to Project Team members, after duly verifying the work done by them in their project

u. Get required approvals from SC for participation of QCs in national and international QC competition, and assist the QC in preparing for the same

v. QCU would organize site-specific QC competitions, twice a year, in their respective regions. They would identify top 3 projects implemented in their region in the last 6 months. April – September would be considered as one cycle, and October – March would be considered as the second cycle. QCU would identify top 3 projects in their region at the end of the cycle.

These 3 top projects would qualify for OMC-level QC competition.

QCU would evaluate each implemented projects in their region according to the Project Evaluation Framework given below:

<table>
<thead>
<tr>
<th>#</th>
<th>Evaluation</th>
<th>Evaluation Point</th>
<th>Maximum</th>
<th>Marks</th>
</tr>
</thead>
</table>

OMC QC Manual July 2019
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<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
<th>Marks</th>
<th>Obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Selection of Project</td>
<td>Was the selected problem a significant bottleneck for OMC? To what extent was the problem proven? (With 5 marks being existence of problem proven with data or photographs, and 1 mark being no concrete evidence available to prove existence of problem)</td>
<td>5</td>
<td></td>
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<tr>
<td>2 Problem Definition</td>
<td>To what extent was the problem definition SMART? (With 10 marks being all 5 criteria being mentioned in the problem definition; 2 marks being only 1 criteria mentioned in the problem definition)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>3 Problem Analysis</td>
<td>To what extent did the analysis bring out the root causes of the problem? (With 10 marks for no root cause left out, 2 marks for major root causes left out)</td>
<td>10</td>
<td></td>
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<tr>
<td>4 Solution</td>
<td>Was a</td>
<td>5</td>
<td></td>
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<tr>
<td>Formulation</td>
<td>Brainstorming exercise conducted to identify potential solutions?</td>
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<td></td>
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<td>-------------------------------------------------</td>
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<tr>
<td></td>
<td>To what extent was the brainstorming exercise effective in identifying solutions?</td>
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<tr>
<td></td>
<td>(With 5 marks for Effective solutions identified, 1 mark for identified solution not being effective enough)</td>
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<tr>
<td></td>
<td>To what extent was a Cost vs Benefit analysis done before selecting the solutions?</td>
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<tr>
<td></td>
<td>Were administrative approvals taken before implementing the solutions?</td>
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<tr>
<td>Solutions Implementation</td>
<td>Was a Project Monitoring Toolkit prepared?</td>
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<tr>
<td></td>
<td>(Project Monitoring Toolkit includes Gant Chart, Responsibility Matrix)</td>
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<td></td>
<td>To what extent has there been adherence to the project monitoring toolkit?</td>
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<td></td>
<td>To what extent Issue Log and Risk Registers maintained during solutions implementation?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Results</td>
<td>To what extent has there been adherence to budgeted cost?</td>
<td>5</td>
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<td>----------------------------------------------------------</td>
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<td></td>
<td>To what extent the objective of solving the problem solved?</td>
<td>5</td>
<td></td>
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<tr>
<td></td>
<td>To what extent were the intended benefits achieved?</td>
<td>5</td>
<td></td>
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<tr>
<td></td>
<td>To what extent can the solution be used to solve problems in other regions/sections?</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 Marks – Exact replication</td>
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<td></td>
<td>3 Marks - Minor modifications required</td>
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<td></td>
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<tr>
<td></td>
<td>2 Marks – Major modifications required</td>
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<td></td>
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<tr>
<td></td>
<td>0 Mark – Can’t be used elsewhere</td>
<td></td>
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<thead>
<tr>
<th>7 QC Conduct</th>
<th>To what extent minutes and records kept for every meeting? (With 5 marks for minutes and records kept for every QC meet, 0 mark for no minutes and records kept)</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To what extent did each QC member participate in the project?</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Was the Case Study preparation and/ or presentation by the QC upto the mark?</td>
<td>5</td>
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**Total Marks** | **100** |
3.1.4. Steering Committee (SC)

SC would be composed of:

i. Managing Director - Chairman
ii. All Functional Directors - Members
iii. CGM (Mining) - Member
iv. GM (Materials) - Member
v. AGM (Production) - Member

Director (Personnel) would be the convener of SC meetings.

Administrative duties of SC in QC initiative:

a. Make changes in the policy governing the role of QCUs, Facilitators and QCs

b. Make changes in the governing structure of improvement projects and high-value improvement projects, as and when required

c. Establish targets for QCs and QCUs, including the number of improvement projects and number of high-value projects that each QC and QCU is supposed to do, at the start of the financial year.

The SC would set a target for each QCU in terms of improvement projects and high-value projects. For example, it may decide that each QCU has to complete 15 improvement projects and 3 high-value projects in the year.

If required, SC may choose to set different targets for individual QCUs taking into consideration things like employee strength and number of QCs in that particular region.

d. SC can decide to select a few improvement themes for the year, and QCUs and QCs may select projects according to the selected themes. QCUs and QCs would still be allowed to select projects outside the given themes. The themes chosen by SC would serve to act only as a guideline for the QCUs and QCs when it comes to selecting improvement projects.

For example, SC may decide themes like Cost Optimization, Safety, Sustainability, Productivity, Quality Control, Environment etc. QCUs and QCs may select projects from the themes which are chosen by SC

e. SC would decide the reward amount for winners of Guna Sampurna Puraskar at the start of every financial year
f. Prepare a budget for QC program and identify sources of funds for the same

g. Prepare a budget for QC program and identify sources of funds for the same

h. Advise QCs and QCUs on selection of improvement projects and high-value projects

i. Track progress of all QCs and QCUs

j. Provide necessary support to QCUs and QC for project implementation

k. Provide necessary support to QCUs and QCs for capability development initiatives

l. Provide rewards and certificates of appreciation based on recommendations of CFT

m. Assist in promotion of BE/ CIP initiatives

n. Act on issues raised by QCUs or QC members

o. Approve the participation of QCs in national and international level QC competitions

p. Conduct quarterly review of the work done by QCUs and QCs at the end of each quarter

q. Conduct an OMC-level QC competition, “Guna Sampurna Puraskar”, twice a year. April – September would be considered as one cycle, and October – March would be considered as the second cycle for the competition. QC teams with the top 3 projects from each QCU would compete in the event. The Guna Sampurna Framework given below would be used to score the participating teams:

<table>
<thead>
<tr>
<th>#</th>
<th>Evaluation Criteria</th>
<th>Evaluation Point</th>
<th>Maximum Marks</th>
<th>Marks Obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Selection of Project</td>
<td>Was the selected problem a significant bottleneck for OMC?</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Was it statistically proven that the problem existed?</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Problem Analysis</td>
<td>Whether the objective of solving the problem was established?</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>To what extent did the</td>
<td>15</td>
<td></td>
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</tbody>
</table>
### Analysis

Does the analysis bring out the root causes of the problem?

(With 15 marks for no root cause left out, 2 marks for major root causes left out)

### Solution Formulation

Was a Brainstorming exercise conducted to identify potential solutions?

To what extent was the brainstorming exercise effective in identifying solutions?

(With 10 marks for Effective solutions identified, 1 mark for identified solution not being effective enough)

Were administrative approvals taken before implementing the solutions?

### Results Evaluation

To what extent was the objective of solving the problem met?

To what extent were the Tangible (Quantifiable/Verifiable) and Intangible benefits accrued?

To what extent can the solution be used to solve problems in other regions/sections?

(6 Marks – Exact replication of solution possible
4 Marks - Minor modifications required in the solution)
3.2. Evolution of QCs in OMC

In order to infuse the culture of Business Excellence, Pilot QCs were formed to carry out CIP initiatives across OMC. Pilot QCs were tasked with the responsibility of identifying and implementing improvement projects across mines. They would be in the forefront of all BE/ CIP initiatives in OMC. By continuously resolving issues affecting OMC and its workers, QCs would act as the enablers in OMC embracing a culture of Business Excellence.

6 Pilot QCs have been created in OMC for identifying and working on improvement projects. The Pilot QCs consist of members from different sections.

The pilot QC members would be exposed to various QC tools and trainings. They would have to identify and work on improvement projects. Once the team members have been trained in solving workplace problems, they would be encouraged to become Quality Circle Captains, and have Quality Circles of their own.

In other words, the members of pilot QCs would be groomed to become QC Captains. As QC Captains, they would lead their own QCs. Each QC would consist of members from the same department or section or function. For
example, separate QCs would be formed for mining, sales, evacuation, hospitality, logistics, forest & environment, finance etc. The mining QC will have members from only mining section. The finance QC will only have members from finance section, and so forth and so on.

3.3. Formation of Quality Circles

3.3.1. QC Captains

A. Desired Characteristics

It is desirable that QC Captains should have the following characteristics:

a. Experience of working in improvement projects
b. Trained in the usage of QC Tools and Techniques
c. Energetic and passionate about contributing to OMC’s success
d. Ready to volunteer for improvement initiatives
e. Knowledge of/ desire to learn advanced Quality Control methodologies

3.3.2. QC members

A. Desired Characteristics

It is desirable that the QC members should have the following characteristics:

a. Energetic and passionate about contributing to OMC’s success
b. Ready to volunteer for improvement initiatives
c. Experience of working in/ desire to work on improvement projects
d. Knowledge of/ desire to learn Quality Control methodologies

3.3.3. Registering QCs

The following steps would have to be followed to register a QC:

a. QC Captains would be chosen by QCU’s in their respective regions
b. QC Captains should identify employees from their section/ department/ function who are interested in being part of QCs, and ensure that there are between 4-10 employees to form a QC. Both executives and non-executives should be part of a QC
c. QC Captains should submit the following information to the QCU through the Facilitator:
   • QC name
• Identify region and mines/site
• Name of QC Captain and designation
• Name of QC members and their designation
d. QCU would approve the formation of the QC

3.3.4. Changing composition of QC

a. QC Team Members
   • In case more members need to be added to a particular QC, QC Captain can do the same by sending a revised membership list to the QCU, and QCU would approve the new formation
   • In case a QC member is transferred to another site, and the QC member wishes to be a part of a QC in his/her new location, he/she should speak to the QC captain/Facilitator of that region, and ask to be included in the QC of that region. QC Captain can follow the above mentioned step to include him/her in the QC
   • In case some members need to be removed from a QC, either due to retirement, transfer of employees or any other reason, QC Captain should send a revised membership list to the QCU, and QCU would approve the new formation

b. QC Captain
   • QC Captains are chosen by QCU of that region. If a QC member or other OMC employee, wishes to become a QC Captain, he/she should write to the QCU of that region, stating the reasons why he/she should be chosen as a QC Captain.

The decision to select someone as a QC Captain would depend totally on the judgment of the QCU.
   • In case a QC captain is transferred to another site, and he/she wants to become a QC Captain in that new location, he/she should write to the QCU of the new location, and get their approval
   • In cases where the QC Captain has to be replaced, either due to retirement or transfer or any other reason, the Facilitator should inform QCU of the same, and QCU will select a new QC Captain

c. Facilitator
• Facilitators are chosen by QCUs. In case additional Facilitators are required in a region, QCU would be responsible for choosing new Facilitators

• In case a Facilitator is transferred to another site, and he/ she wants to become a Facilitator in that new location, he/ she should write to the QCU of the new location, and get their approval

• In cases where the Facilitator has to be replaced, either due to retirement or transfer or any other reason, the QCU will have to select a new Facilitator

3.4. Expense booking for QC programs

Rewards and remunerations awarded for improvement projects, as well as expenses incurred for QC initiatives (excluding project costs), would be booked under the budget allocated for Employee Welfare. Personnel section would book the QC initiative expenses under Employee Welfare budget.

In RO, facilitators would get the approval from RM for the expenses incurred under QC initiatives, and send the expense details to the Personnel Section at RO.

In HO, facilitator(s) would get the approval from SC for the expenses incurred under QC initiatives, and send the expense details to the Personnel Section at HO.
4. Roles and Duties of Quality Circle

4.1. Undertake improvement projects

Identifying and implementing improvement projects is the most important task of QCs. Improvement projects form the crux of why QCs have been formed in OMC. QCs will identify improvement opportunities in their work areas, and select them as projects. A QC has to complete the number of projects each financial year as determined by the SC, including high-value projects.

The entire project lifecycle from conducting meetings to identify projects to implementing the project to monitoring project benefits has been given below:

4.1.1. Meeting guidelines

QC members have to get together for projects related discussion.

...a. Frequency of meetings

Each QC has to meet once a week for an hour. The day, time and venue of the meeting would be fixed, and intimated to the QC members by QC Captain.

...b. Quorum required

Minimum 50% of the QC members should be present in a meeting for the meeting to be considered valid. In case, the Quorum is not achieved, meeting should take place some other day, but in the same week.

QCU should ensure that QC members conduct their weekly meeting.

...c. Code of conduct

The following principles should be kept in mind in every meeting:

• Each QC member should ensure that they attend the QC meet. In case of non-availability, the same should be communicated to the QC Captain beforehand

• They should reach the venue on time

• The environment should be comfortable and relaxed. Every member should feel free to put forth his/ her points
• Each member should speak in a QC meeting. Every participant, irrespective of the designation, should be treated as an equal in the meetings

• The concept of ‘No idea is a bad idea’ should be followed

...d. Arriving at a decision
Decisions will be arrived at in QC meetings as a result of general consensus. Once everyone has had a chance to give their opinion on the topic being discussed, general consensus can be gauged through a Show of hands.

...e. Documentation of meetings
It is the responsibility of the QC Captain to ensure all vital points discussed in the meeting are captured. The meeting should be documented and details sent to the QCU each week. A register should be maintained by the QC for recording the minutes.

The following details should necessarily be captured in the minutes:

• Date
• Name and designation of members present
• Decisions taken
• Key action points along with name of the person responsible for completing the task and the scheduled date

At the start of the next meeting, the progress made against the recorded minutes should be tracked, and observations duly noted.

4.1.2. Guidelines for selecting Continuous improvement projects

The following guidelines should be used for shortlisting improvement projects:

• Significant benefits should accrue to OMC on account of doing the project
• Existing skillset of QC members
• Timeframe of completing the project

As QC is a voluntary body, QCs are free to shortlist any improvement project which they want to work on. Guidelines are mere indicators, and QCs are free to shortlist projects on other parameters. However, the said project should be related to the broader focus areas for Continuous Improvement Projects mentioned below:
4.1.2.a. Broader focus areas for Continuous Improvement Projects

A project idea would be considered eligible if it falls under any of the following categories:

a. Achieving OMC’s strategic, tactical and operational objectives
b. Improving OMC’s profitability
c. Improved operating efficiency like throughput improvement, evacuation debottlenecking, quality improvement, rationalization of manpower etc.
d. Improve Star rating of mine
e. Augment CSR Initiatives
f. Reducing physical effort/ ergonomic interventions in certain operations and thereby leading to reduction in fatigue and increase in productivity
g. Improvement of working conditions including health and welfare of employees
h. Improvement in safety standards of mines, environment and pollution control
i. Improvement in maintenance and utilization of mining equipment
j. Savings in usage of materials including fuel and power
k. Improving ways and means for using indigenous materials in place of imported one (import substitution)
l. Making the general working environment safer
m. Any other area which may improve company’s performance and image
n. Provide better and more effective welfare measures
o. Simplification of practices/ procedures/ processes
p. Elimination of ineffective movement/ delays/ re-work/ duplication
q. Achieving economy in usage of stationery, office facilities, administration etc.
r. Improvement of working conditions, communication and facilities
s. Reduction of wastages pertaining to cost, time, energy, maintenance, environment etc.

t. Rationalization of works, materials, methods etc.

4.1.3. Selecting improvement projects

...f. Preparing long-list of improvement ideas

The first step in initiating continuous improvement starts with preparing a long list of all possible improvement ideas. Every QC member would speak in turn, and give their improvement suggestion. When a QC member runs out of improvement ideas, he/she can pass. This process continues till every QC member runs out of additional improvement ideas. Every QC member should be free to give their suggestion, and every idea should be judiciously written down. No idea should be rejected at this stage, so as to encourage members to freely give their ideas.

At the end of the process, the QC has a long-list of improvement ideas which it can use for shortlisting improvement projects.

For example, a Mining QC may list down the following potential improvement ideas:

i. Have Digital copy of all statutory documents

ii. Reduce weighbridge downtime/breakdown hours

iii. Cleaning of Load cell in weighbridge to be done through jet spray or compressed air instead of manual cleaning

iv. Installation of Quick Dispatch system to increase ore evacuation capacity from mine

v. Get Forest Clearances for the entire mine lease area

vi. Conduct safety awareness training every 6 months inside the mines

vii. Institutionalize and monitor safety KPI at mine level

viii. Implement Geo-Technical Monitoring system

ix. Digital Loading pass to be issued to trucks

x. Use of Chemical dust inhibitor to improve water capability to suppress dust for longer period of time
A sample list of improvement projects have also been provided in Annexure – I for reference.

...g. Categorization of Improvement Ideas

I) Category A – Problems which affect the work area of QC team and can be solved by the QC team without any outside assistance

II) Category B – Problems which affect the work area of QC team but solving the problem would require assistance from other sections, QC teams, regions, local population or sector experts

III) Category C – Problems which affect OMC as a whole, and solving the problem would require intervention of OMC Management or the Government, obtaining Statutory Approvals etc. Finding the solutions for Category C problems would be difficult for any specific QC

A QC should first attempt to solve Category A problems. Once Category A problems have been solved, they can take up Category B problems.

Category C problems can be taken up only once all Category A and Category B problems have been solved, and after taking required approvals from the QCU and Sectional Head at HO. Category C problems can also be discussed at QCU level at the time of selection of High-Value projects.

For illustration, after listing down the potential improvement ideas, the QC may categorize it into A, B or C category.

<table>
<thead>
<tr>
<th>#</th>
<th>Improvement Idea</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Have Digital copy of all statutory documents</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>Reduce weighbridge downtime/ breakdown hours</td>
<td>A</td>
</tr>
<tr>
<td>3</td>
<td>Cleaning of Load cell in weighbridge to be done through jet spray or compressed air instead of manual cleaning</td>
<td>B</td>
</tr>
<tr>
<td>4</td>
<td>Installation of Quick Dispatch system</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Increase ore evacuation capacity from mine</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>5</td>
<td>Get Forest Clearances for the entire mine lease area</td>
<td>C</td>
</tr>
<tr>
<td>6</td>
<td>Conduct safety awareness training every 6 months inside the mines</td>
<td>A</td>
</tr>
<tr>
<td>7</td>
<td>Institutionalize and monitor safety KPI at mine level</td>
<td>C</td>
</tr>
<tr>
<td>8</td>
<td>Implement Geo-Technical Monitoring system</td>
<td>C</td>
</tr>
<tr>
<td>9</td>
<td>Digital Loading pass to be issued to trucks</td>
<td>B</td>
</tr>
<tr>
<td>10</td>
<td>Use of Chemical dust inhibitor to improve water capability to suppress dust for longer period of time</td>
<td>B</td>
</tr>
</tbody>
</table>

It should be noted that the categorization here is just for illustration, and the categorization may differ from case to case basis. For example, a particular QC may need assistance from other teams or personnel from other regions to solve a particular problem, so it would categorize the problem as Category B. But some other QC may possess the skills to solve the problem on their own, and not be dependent on any other team, so they would choose to categorize the problem as Category A.

...h. Ranking Improvement Ideas

Once the categorization is done, the ideas have to be ranked by the QC members. The QC members can give a score of 1-10 (with 10 being the highest) to the improvement idea on the topic of Importance, Urgency and Feasibility of solving the problem:

- Importance – Would substantial gains accrue to OMC/ substantial loss to OMC be avoided if the problem is solved? If yes, then the problem is Important

- Urgency – Can solving the problem wait, or is it imperative that the problem should be solved as soon as possible? If the problem has to be solved as soon as possible, then it is Urgent

- Feasibility – Is it possible to solve the problem in terms of cost, effort and likelihood of obtaining success? If there is a high
probability that the problem can be solved given the resources, then it is Feasible

For illustration, the Category A problems can be given scores out of 10 in each of the 3 categories by all the QC members:

<table>
<thead>
<tr>
<th>Improvement Idea</th>
<th>Member</th>
<th>Importance</th>
<th>Urgency</th>
<th>Feasibility</th>
<th>Total Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have Digital copy of all statutory documents</td>
<td>QC Member 1</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>QC Member 2</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>QC Member 3</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>QC Member 4</td>
<td>5</td>
<td>6</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>QC Member 5</td>
<td>4</td>
<td>4</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>24</td>
<td>26</td>
<td>43</td>
<td>93</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>4.8</td>
<td>5.2</td>
<td>8.6</td>
<td>18.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Improvement Idea</th>
<th>Member</th>
<th>Importance</th>
<th>Urgency</th>
<th>Feasibility</th>
<th>Total Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce weighbridge downtime/breakdown hours</td>
<td>QC Member 1</td>
<td>10</td>
<td>10</td>
<td>7</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>QC Member 2</td>
<td>9</td>
<td>10</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>QC</td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>25</td>
</tr>
</tbody>
</table>
**Shortlisting Improvement Projects**

<table>
<thead>
<tr>
<th>Improvement Idea</th>
<th>Member 1</th>
<th>Member 2</th>
<th>Member 3</th>
<th>Member 4</th>
<th>Member 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct safety awareness training every 6 months inside the mines</td>
<td>QC Member 1</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>QC Member 2</td>
<td>9</td>
<td>8</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>QC Member 3</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>QC Member 4</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>QC Member 5</td>
<td>8</td>
<td>8</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>42</td>
<td>46</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>8.4</td>
<td>8.4</td>
<td>9.2</td>
<td>26.0</td>
<td></td>
</tr>
</tbody>
</table>
After assigning a score to all the projects from a particular category, the project with the maximum score should be selected first, the project with the second highest score should be selected second, the project with the third highest score should be selected third, and so on, and so forth.

Ideas which get less than 60% of the score can be rejected. For example, if an idea gets an average score of less than 18 out of 30, it can be rejected so that the focus can remain on more important projects.

Once Category A projects are complete, Category B projects can be shortlisted using the same criteria.

For illustration, based on the scores given above, the following should be the order for selection of Category A projects:

1) Reduce weighbridge downtime/breakdown hours
2) Conduct safety awareness training every 6 months inside the mines
3) Have Digital copy of all statutory documents

4.1.4. Identifying solutions

Solution formulation exercise will be done for shortlisted improvements projects during QC meeting. The solution should be designed keeping in mind that re-occurrence of the problem should be avoided. Final solution appropriate for implementation will be finalized and taken up for implementation for approval by QCU and Sectional Heads.

4.1.5. Selecting project team members

Once the solutions have been sketched out, project team members have to be finalized. Names and designations of the project team members, as well as the time duration for which these members would be required for working on the project, should be sent to the QCU for approval.

The QC Captain of that particular QC, along with the project team members, constitutes the project team. The QC Captain would be the head of the project team. The project team members would be taken from the same QC.

If required for any particular project, Contractual employees/Contractors/Agency workers can be made a part of the project as project team members. All project team members would be treated at par. In the event of any particular project becoming eligible for certain reward, all project team members will be eligible for that reward.
It should be noted that no member can work on more than 2 improvement projects, including high-value projects and projects being implemented under Sahbhagita, at a given point of time.

The Facilitator will monitor and guide the progress of the project team.

4.1.6. Get approval for implementing the solutions

A) Approval from QCU

A business case should be prepared for the shortlisted projects. The business case will help the QC in getting the approval and support from the QCU for solutions implementation.

The business case must have the following details:

- Prove that the problem exists through adequate data and analysis
- Show how the problem is hampering OMC
- Depict how solving the issue will benefit OMC
- State which solutions can be implemented to solve the problem

A sample Business Case formulation has been provided in Annexure II for illustration.

Along with the Business Case, the detailed solutions should be presented to the QCU for their approval. The associated cost for implementing the solution, timelines, responsibility for implementing the solution etc. should be approved by the QCU.

If QCU has any comments on the solutions plan, the same should be incorporated by the project team. Once the necessary changes have been made, the solutions should once again be sent to the QCU for their approval.

B) Approval from Sectional Heads

Once the QCU is satisfied with the solutions plan, the QCU will forward it to the concerned Sectional Heads at HO for their final approval. The business case, solutions plan, expected costs, project timelines, responsibility for implementing the solutions etc. should be sent to the Sectional Heads at HO. Approval from the Sectional Heads is vital for solutions implementation.

The Sectional Heads will have 15 days to respond to the proposal sent by the QCU. If no response is received by the QCU within 15 days, the solution implementation would be deemed approved, and the QCU can direct the QC to implement the solution on the ground.
4.1.7. Preparing project plan

Once the solutions have been finalized, and necessary approvals for implementing them have been obtained, a detailed project timeline should be prepared by the project team. In addition to other required information, the project timeline should necessarily have the following details:

a. List of activities and sub-activities to be completed in order to implement the solution
b. Date by which the activities and sub-activities should be completed
c. Name of the person responsible for each activity and sub-activity
d. Dependency of the activity or sub-activity to any prior activity or sub-activity

The project timeline should be shared with the QCU, and comments, if any, should be incorporated into the timeline.

For reference, a sample project plan has been provided in Annexure – III.

4.1.8. Monitoring of project team

The Facilitator would update the QCU on the progress made by the project team in each QCU meeting. The progress made by the project team would be compared with the details mentioned in the project timeline, and reasons for deviations, if any, should be provided by the Facilitator/ QC Captain.

QCU would then share the progress update with the SC after every QCU meeting.

4.1.9. Documenting project completion

Once the project implementation is complete, QC Captain would send a letter to the QCU, with documentary evidence and photographs if required, stating that the project has been implemented.

An audit would be done on the ground by the QCU to certify that the project implementation is indeed over, and keep a record of how many projects the QC has completed in that financial year. This would help the QCU track where the QC stands with regards to the improvement project completion target as set by the SC in the beginning of the financial year.

4.1.10. Evaluate Results
After completion of the project, project team has to prepare a project report for the QCU. QCU should examine if the objectives of doing the project have been achieved or not.

In addition to other required information, the report should necessarily contain the following details:

- The outcome of the project along with sufficient evidence for the same
- Actual activity and sub-activity completion dates, along with names and designation of person responsible for completion
- Challenges faced in completing the project
- Learnings from the project
- Tools, methodologies and skills needed to complete the project

For illustration, one of the improvement projects taken up by Pilot Quality Circle in Gandhamardan iron ore mines was Improving Early Hour Productivity. One of the solutions proposed to achieve that was ensuring Loaders arrived earlier, so that ore evacuation can begin in the early hours. In order to prove that this result was indeed achieved, loader in-time data was meticulously recorded by the project team. A comparison of loader in-time for the months of September, October and November in the figure below does show that loader-time has indeed significantly improved.

**Figure 5 Evaluating Results - Improving Loader-In Time**

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...j. **If desired results have not been achieved**

In case desired results have not been achieved, QCU has to work with the QC and project team to identify the reasons for not meeting project objectives, and create a new project plan to meet the objectives.

...k. **If desired results have been achieved**

In case desired results have been obtained, QC has to standardize the process. The process followed to solve the problem should be documented and shared with other OMC employees. Wherever possible, the same steps can be used to solve similar issues or problems being faced by other QCs.

### 4.2. Undertake High-Value improvement projects

A QCU should conduct **XXX** high-value improvement projects in a financial year, as decided by the SC each year. A high-value improvement project is one wherein quantitative benefits accruing to OMC on account of doing the project should be more than INR 1 Crore. Implementation of all high-value projects will be overseen by CGM (Mining) from the SC.

A high-value improvement project would be led by a Facilitator. For a high-value project, project team members can be drawn from multiple QCs.

#### Implementing High-Value Projects

a. QCU identifies improvement projects with projected benefits of more than INR 1 crore

b. A Facilitator is chosen by the QCU to lead the high-value project

c. A Solutions Design workshop would be held wherein QCU members, QC Captains and chosen QC members will participate. The objective of the workshop would be to formulate probable solutions to solve the problem

d. Facilitator should ensure that the probable solutions are detailed out, along with the Business case, associated costs, risks involved, steps to mitigate those risks, and sent to the QCU

e. Once project implementation is approved, a project team, led by the facilitator, will be formed by the QCU. Project team will contain members from multiple QCs.
If required for any particular project, Contractual employees/Contractors/Agency workers can be made a part of the project as project team members. All project team members would be treated at par. In the event of any particular project becoming eligible for certain reward, all project team members will be eligible for that reward.

f. The project team will then submit the complete Project Plan to the QCU for implementing the solution

g. If required, QCU will ask the project team to make required modifications in the project plan

h. Once the project plan is approved by the QCU, they will send it to CGM (Mining) for final approval. As desired by CGM (Mining), required modifications will be made in the project plan by the project team. Once the final approval is received from CGM (Mining), the team can begin the implementation of the project

i. QCU to supervise high-value projects closely, and provide fortnightly progress report to CGM (Mining) and the SC. Ultimate responsibility of completing high-value projects lies with the QCU

j. Once the project implementation is complete, QCU would send a letter to the CGM (Mining), with documentary evidence and photographs if required, stating that the project has been implemented

k. After implementation is complete, project team has to prepare a project report, and send it to CGM (Mining). CGM (Mining) should examine if the objectives of doing the project have been achieved or not. Corrective action to be taken in case projective objectives have not been met.

In addition to other required information, the report should necessarily contain the following details:

- The outcome of the project along with sufficient evidence for the same

- Actual activity and sub-activity completion dates, along with names and designation of person responsible for completion

- Challenges faced in completing the project

- Learnings from the project
• Tools, methodologies and skills needed to complete the project

4.3. Promote Knowledge Exchange

A platform should be built to enable QCs to learn from each other. It can be done by facilitating knowledge exchange and collaboration in live projects.

Skills and knowledge learned by doing improvement projects have to be shared with other QCs. A knowledge portal should be built wherein all project related information would be available for QC members. In addition to the knowledge portal, QC members should interact on a regular basis to facilitate exchange of knowledge and ideas.

A. Frequency of Meetings

A meeting would be organized once every quarter wherein 2-3 representatives from each QC can get together at HO.

MR of BE program, will organize the meeting at HO after obtaining approval from SC.

B. Agenda of Meeting

The purpose of the meeting would be to present their project findings and outcome to other QCs in OMC.

C. Sharing of information and discussion

Each QC would provide an update on the work done by them in the quarter. They would give a presentation on the improvement project done by them.

The presentation would contain information related to reasons for selecting that particular project, methods adopted to diagnose the root cause of the problem, solutions identified, tools and technologies used, project plan, challenges faced, project outcome, benefits realized and learnings from the project.

4.4. Represent OMC in various QC related national and international forum

Participating in various QC platforms, both nationally and internationally, will enable OMC to showcase its brand to the world. It will also enable OMC
employees to learn the problem solving methodologies being used by Quality Circles in other reputed organizations.

1.4.1. Identifying competitions where OMC can take part

The first step would involve identifying competitions wherein QCs can take part. It would be the responsibility of the QC to identify the competition wherein they would like to compete. They would also have to identify the project which they would like to present in the competition.

QC will have to obtain the approval from the QCU and SC, in subsequent order, before they can present the project in any competition. MR of BE program would assist the QC in obtaining approvals from SC, after QC has obtained the necessary permission from the QCU.

In the initial stages, a QC should compulsorily take part in at least 1 national or international competition each year. This number may be increased later on.

1.4.1. QC to prepare and take part in the competition

It would be the responsibility of the QC to prepare effectively for the competition. They have to prepare the documents as required for the competition, and send it to the QCU and SC for their approval, in subsequent order, before submitting them for the competition.

4.5. Promotion of BE/ CIP initiatives

In addition to taking part in BE/ CIP initiatives, it is equally important to highlight and showcase the BE/ CIP work being done in OMC to all stakeholders.

1.5.1. Preparing promotion materials

QCs should prepare the promotion materials for all BE initiatives (including SaHbhagita) happening in their respective regions, be it leaflets, banners, articles, letters or presentations for training programs, workshops, improvement projects, QC competitions, rewards etc.

1.5.1. Internal marketing

QCs should promote all the BE/ CIP tasks being done by them within the organization. They should put up promotion materials prepared by them in notice boards in ROs/ HO and mines offices. They should take steps to ensure their work is highlighted in OMC’s journals.
Winners of rewards and remunerations at mines level and OMC level should be showcased in notice boards in RO and HO.

1.5.1. **External marketing**

In addition to the internal marketing, selected snapshots of the good work being done by QCs should be highlighted in OMC’s website and social media accounts. QC should prepare the promotion material in required format, and obtain necessary approvals from QCU and SC. MR of BE program would assist the QC in obtaining approvals from SC, after QC has obtained the necessary permission from the QCU.

Once the approvals are obtained, QC has to liaison with the IT or Personnel Section, and get the information showcased in OMC’s social media accounts and website.

**5. Capability Development of Quality Circle**

In order for the QC to function effectively, the members have to be made proficient in identifying, analyzing, prioritizing and solving organizational issues. They would require training in problem solving methodology, statistical quality control and group processes. A three-way approach would be followed to impart the QC members with the required skillset and experience.

**5.1. Promote Knowledge Exchange**

As mentioned in Clause 4.3 of this document, knowledge exchange among QCs would be encouraged by providing them with a platform to talk about their improvement projects and learn from the work being done by other QCs.

MR of BE program, after getting approval from SC, will organize a knowledge sharing program for QCs once every 3 months at a particular venue.

**5.2. National/ International QC competitions**

QCs would be encouraged to take part in National/ International level QC competitions. This will enable OMC to showcase its brand in front of other leading companies in India. Competing with QCs of other companies would create a sense of competition among QC members, and this will spur them on to give their best efforts in solving issues being faced by OMC. Not only will this help QCs develop their analytical and problem solving traits, this will also motivate them to work on their presentation and communication skills.

QCs will also get an opportunity to learn from the work being done by QCs of other companies. They will get to know about the latest analytical tools being
used in other companies, their problem diagnosis methodology, the solutions framework they adopt, their research findings and take cues from their presentation skills.

All in all, it would further the skills of QC members, equipping them with the tools required to resolve OMC’s challenges.

SC would have the final call on which competitions QCs should compete in, and MR would be responsible for all necessary arrangements. SC would also have the final call on which projects should be presented in competitions.

5.3. Trainings and certifications

A. Required Skillsets

For a QC to be productive, its members should possess certain Must-have skillsets:

a. Data Recording: Recording correct and reliable data becomes the starting point of any improvement project. QC members should be able to identify the sources of reliable data or prepare the templates to capture the required data.

b. Data Analysis: Making sense of any data is essential to be able to correctly diagnose the problem in hand. QC members should be trained in various data analysis tools like Microsoft Excel, Power BI, Qlik View, Tableau etc.

c. Problem Solving Tools: In order to effectively diagnose the root causes of the problems, QC members should have exposure to problem analysis tools like Pareto Chart, 5 Whys, Fishbone Diagram, Scatter Diagram, Cause and Effect analysis, Failure Mode and Effects Analysis etc.

d. Prioritization: QC members should be able to rank tasks in the order of importance and criticality, and tackle the most important issues at first. QC members should also be able to prioritize as to when he/she should focus more on his/her day to day work, and when to focus more on QC related work.

e. Solution Design: QC members have to be encouraged to think about identifying solutions to the problems affecting OMC. They should be adequately trained in solution design steps so as to ensure QC is able to find out answers to the issues plaguing OMC.

f. Interactions with other stakeholders: QC members should be able to work along with a diverse range of people from different departments and regions, people from within and outside the organization. They
require strong inter-personal skills to be able to communicate effectively with all the stakeholders.

g. **Project Management**: The entire lifecycle of an improvement project has to be managed in a streamlined manner. Getting planned work done in scheduled timeline is a necessity in any improvement project.

h. **Willingness to learn**: A lot of QC work is about facing challenging situations and exploring new solutions. An inquisitive mind is essential to be learn new solutions and to embrace new tools, ideas and processes.

i. **Leadership**: QC members can be leaders of the future. They should have the capability to take responsibility, decisions, delegate tasks and lead by example.

j. **Report Writing & Presentation**: The quality of report writing and presentation would go a long way in top management accepting and appreciating the proposals and solutions being presented by QCs. Good report writing and presentation skills are vital to make an impact in QC competitions.

### B. Essential Trainings Required

Wherever required, adequate training arrangements have to be made to ensure QC is able to work according to its optimum level. Based on the essential skillsets, the following training programs should be compulsorily administered to QC members:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Training Description</th>
<th>Skillset</th>
</tr>
</thead>
</table>
| 1     | Lean Six Sigma Green Belt | • Data Analysis  
• Problem Solving Tools  
• Prioritization  
• Solutions Design |
<p>|       | Lean Six Sigma is a team-focused managerial approach that seeks to improve performance by eliminating waste and defects. It combines Six Sigma methods and tools and the lean manufacturing/lean enterprise philosophy, striving to eliminate waste of physical resources, time, effort and talent, while assuring quality in production and organizational processes. |          |</p>
<table>
<thead>
<tr>
<th>3</th>
<th><strong>MS Excel</strong> – Beginner, Intermediate and Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program</strong></td>
<td>Program is designed to take participants from beginner level to advanced level. Sound knowledge of MS Excel is essential for data recording and analysis. After completing the certification, participants would be able to analyze alternative data sets, create dynamic worksheets by using PivotTables, create charts and graphics, automate repetitive tasks, work with other Microsoft Office programs, and collaborate on workbooks.</td>
</tr>
</tbody>
</table>
| **Training Objectives** | • Data Recording  
• Data Analysis  
• Problem Solving  
• Project Management |

<table>
<thead>
<tr>
<th>4</th>
<th><strong>Microsoft PowerPoint 2013</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Training</strong></td>
<td>The MOS PowerPoint 2013 training provides a broad overview of Microsoft PowerPoint 2013 for creating new presentations using keyboard shortcuts and implement multimedia and special effects through animation. Microsoft PowerPoint 2013 certification enhances one’s proficiency in analyzing and managing large amount of data.</td>
</tr>
</tbody>
</table>
| **Training Objectives** | • Presentation  
• Interactions with other stakeholders |

<table>
<thead>
<tr>
<th>5</th>
<th><strong>Microsoft Project 2013</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Training</strong></td>
<td>Microsoft Project 2013 Certification Training provides a comprehensive overview of project planning and scheduling, resource pooling and consolidation, customized reporting, estimate and track project costs and an update on new Microsoft Project features.</td>
</tr>
<tr>
<td><strong>Training Objectives</strong></td>
<td>• Project Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6</th>
<th><strong>Solutions</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Training Objectives</strong></td>
<td>Participants are trained on the Solutions</td>
</tr>
</tbody>
</table>
| Design Workshop methodology of “Solution Finding”. Trainers teach the participants as to how they can exercise their thinking powers to come up with optimum solutions. | Design  
• Interactions with other stakeholders |

| 7 Communi cation workshop – Written and Verbal Participants are taught to be more proficient in their communication skills. |  
• Interactions with other stakeholders  
• Leadership  
• Report Writing & Presentation |

Table 3 Essential Training Programs for QC

In addition to the above mentioned essential trainings, the following **Desirable trainings** can also be organized to improve the skill-set of QC members:

- a. Power BI  
- b. Qlik View/ Tableau/ Minitab  
- c. ISO 9001 Lead Auditor Training Certification  
- d. Total Productive Maintenance  
- e. Total Quality Management  
- f. Measurement System Analysis (MSA)  
- g. Leadership and Motivation  
- h. Handling Tough Negotiations

**C. Process for confirming training programs**

- a. QCU to send request for the required training program to SC/ SC identifies the training program on their own  
- b. SC directs the Personnel Section at HO to conduct the required training program  
- c. Personnel Section at HO to organize the training program
6. Reward and Remuneration for Quality Circle

6.1. Reward and Remuneration

QC members would be adequately rewarded through a number of Non-Financial and Financial incentives, for their active contributions in embracing the culture of Business Excellence in OMC. Rewards would be administered at two levels:

- RO
- OMC

6.1.1. Rewards at RO level

A. Non-Financial Incentives

a. Reward and Certificate of Appreciation from RM for the 3 teams that secure maximum marks as per the Project Evaluation Framework. This would be done twice a year.

b. Certificate of Appreciation from RM for each Quality Circle member for their involvement in QC initiatives in the financial year

c. Certificate of Appreciation from RM for the Facilitator for his/her involvement in leading the QC initiatives in the financial year

B. Financial Incentives

a. Project Allowance – Each project team member is entitled to an allowance of INR 500 per month per project for working on Improvement projects. Only those OMC employees who have been chosen by the QCU to be a part of the project team would be eligible for this allowance.

It should be noted that any project team member can be a part of maximum 2 improvement projects at any given point of time. This includes both projects taken up under SaHbhagita, as well as QC programmes. This is to ensure that a QC member is able to allocate sufficient time to his day-to-day tasks and improvement projects.
QC Captain can be a part of more than 2 improvement projects, as their involvement would be required in various projects being implemented by their QC.

b. **Reward for top 3 teams as per Project Evaluation Framework for each QCU**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Reward (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>10,000 for the team</td>
</tr>
<tr>
<td>Second</td>
<td>5,000 for the team</td>
</tr>
<tr>
<td>Third</td>
<td>3,000 for the team</td>
</tr>
</tbody>
</table>

*Table 4 Reward for top 3 teams as per Project Evaluation Framework*

The reward amount would be distributed equally among the project team members.

### 6.1.2. Rewards at OMC level

**A. Non-Financial Incentives**

a. Reward and Certificate of Appreciation for all teams which participate in the *Guna Sampurna Puraskar*

b. Reward and Certificate of Appreciation for the 3 teams that secure maximum marks in the *Guna Sampurna Puraskar*. Reward and Certificate of Appreciation to be also sent to the QCU of those 3 teams

c. Reward and Certificate of Appreciation from SC for QC and QCU which has taken up maximum number of improvement projects in a financial year

d. Reward and Certificate of Appreciation from SC for QC and QCU which has successfully completed maximum number of improvement projects in a financial year

e. Reward and Certificate of Appreciation from SC for QC and QCU which has generated maximum savings from high-value improvement projects in a financial year

f. Reward and Certificate of Appreciation from Chairman, OMC for QCs who have won accolades in some National/International QC competitions in the financial year

MR would assist SC in the computation of the rewards.
B. Financial Incentives

a. Top 3 teams in Guna Sampurna Puraskar

The reward for top 3 teams in the Guna Sampurna Puraskar would be decided by the SC at the start of every financial year. A reward amount would be decided for the project team, as well as the QCU members of that project team.

The Guna Sampurna Puraskar would be given out twice a year.

b. Reward for High-Value projects

Financial reward for High-Value projects will be in line with the reward approved in SaHbhagita:

- Project Leader (Facilitator): 2% of the benefits realized with maximum of INR 30,000 per project
- Project Team members: 12% of the benefits realized with maximum of INR 80,000 distributed equally among all the project team members
- Mines Manager: 2% of the benefits realized with maximum of INR 30,000 per project
- Regional Manager: 1% of the benefits realized with maximum of INR 20,000 per project

Benefit realized through implementation of High-Value projects will be tracked and approved by QCU.
QCU would then get the project benefits audited by the Lead Auditor.
Audited project benefits have to be first approved by the Finance Section at RO, and then approved by the Finance Section at HO.
The project benefits approved by Finance Section at HO would be considered for calculation of rewards.

6.1.3. Rewards in case of Transfer/ Retirement of employees

A. Contractual employees/ Contractors/ Agency workers who have worked as project team members in various Improvement projects/ High-Value projects, should have completed their role in project implementation for them to become eligible for rewards. They would
not be eligible for any rewards in case of partial project implementation.

B. In case permanent employees of OMC who are working on implementation of projects (QCU and Project Team members) retire from OMC or get transferred to some other region before the rewards are due to them, the following would be applicable with reference to rewards and recognition:

a. Complete Project Implementation: If the given employees have worked on implementation of the project from start to finish, they would get their complete share if they are eligible for rewards as per the Project Evaluation Framework or Guna Sampurna Framework

b. Partial Project Implementation: If the given employees have worked on implementation of the project, but not completely from start to finish, they would get a portion of their share if they are eligible for rewards as per the Project Evaluation Framework or Guna Sampurna Framework.

The method for calculating their portion is given below:

Their share in rewards would be divided into two parts -

- 30% for completing the implementation of the project. i.e.,
  30% * share in reward

  This 30% would only be given to the stakeholder who is working on the project at the time of project completion

- 70% for time spent in project implementation.

This 70% would be divided in proportion to the time spent in the project. i.e., 70% * share in reward * (time spent by the stakeholder in project implementation/ total time budgeted for project implementation)

This can be illustrated with the example given below:

- Project team gets first rank in Guna Sampurna Puraskar – Reward for each project team member - INR 15,000 (A)
- Total time budgeted for project implementation = 5 months (B)
- Time spent by team member in project implementation before he/ she is transferred to other region = 4 months (C)
- Time spent by team member who completed the project = 1 month (D)

  Reward applicable to Team member who had to leave project before completion
  
  \[= A \times 70\% \times \left(\frac{C}{B}\right)\]
  
  \[= 15,000 \times 70\% \times \frac{4}{5}\]
  
  \[= 15,000 \times 70\% \times \frac{4}{5}\]
  
  \[= \text{INR } 8,400\]

  Reward applicable to Team member who completed the project
  
  \[= [A \times 30\%] + [A \times 70\% \times \left(\frac{D}{B}\right)]\]
  
  \[= [15,000 \times 30\%] + [15,000 \times 70 \times \left(\frac{1}{5}\right)]\]
  
  \[= \text{INR } 6,600\]
2. Annexure
## Annexure – I: Long List of Improvement Projects

<table>
<thead>
<tr>
<th>Section</th>
<th>#</th>
<th>Improvement Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>F&amp;E</td>
<td>1</td>
<td>Digital Copy of all the approval to be made for easy access to needful</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Sharing of such information with team need to improved and can be done through digital document sharing mechanism</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>MIS can be developed to improve compliance status across various permission granted : EC, FC, CTO etc.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Birds eye view MIS for Management on compliance adherence</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Renegotiate with mining contractor for payment to agency regarding hazardous waste disposal</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>One department to be responsible for all the statutory compliance and return filing.</td>
</tr>
<tr>
<td>Geology and</td>
<td>1</td>
<td>Use of hand held X-RF instrument to facilitate early grade estimation</td>
</tr>
<tr>
<td>Quality Control</td>
<td>2</td>
<td>Defining appropriate Labelling for stocks placed at crushing and screening site as well as final stockyard</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Set-Up reporting mechanism for ore accounting/ incident of grade mismatch (Expected Vs plan)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Labor sorting to remove (-180mm) Product: We can very well crush it to CLO size and realize more value</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Lack of cross check of the analysis report given by Supco Pvt Ltd</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Set-up analysis lab at mining premise</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>No Visibility of grade of ore from scheduling to Production to Crushing/Screening</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Segregate Stock based on Size and grade</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Issues of Preferential loading of crushed fines instead of blended fines ore including crushed as well as screened fines</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Training of Geology and Quality team on Latest tools and techniques (Geostatistics, Kriging)</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Ensure adherence to proper blending ratio as guided by quality team</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Sampling Packaging activity to be done in close proximity of OMC QC team</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Stockyard Tagging</td>
</tr>
<tr>
<td>Personnel</td>
<td>1</td>
<td>Reward and recognition scheme by sectional head to the people for their good work</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Yearly Training Calendar on Regulatory compliance, Safety, Risk, Independence, CSR, OMC strategy and growth plan etc.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Work based time keeping through WBSE model rather than biometric will be more effective in creating supplier customer relationship within organization</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Appointment of welfare officer</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Clear defined reporting line for work and self development of employee is needed</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Independent Grievance redressal cell: online portal for grievance redressal should be developed</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Initiatives to organize employee engagement &amp; fun events to promote cohesive relationship among people working and develop society</td>
</tr>
<tr>
<td>Mining</td>
<td>1</td>
<td>Improvement in the area of paper work</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Digital Copy of statutory documents</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Paper being backed up in case Mines Manager is on leave despite from the fact that a duly authorized person is appointed to fulfill his duty during his absence</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Reuse already installed weighbridge in block A</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Installation of Quick Dispatch system to increase ore evacuation capacity from mine</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>we need to apply for FC for the whole 1590 hectare of block B. Currently FC for 252 Hectare is available that too in patches leading to huge space constraint and limiting scope of operation</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Build continuous transportation system (Belt conveyor/ pipe conveyor) to separate stockyard placed at nearby railway siding</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Cleaning of Load cell in weighbridge can be done through jet spray or compressed air instead of manual cleaning</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Dedicated maintenance crew to be available for all weighbridge for preventive maintenance</td>
</tr>
</tbody>
</table>
Annexure – II: Sample Business Case Formulation

Production Target: Gandhamardan Mine as per mine plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Production in MT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 17</td>
<td>2.99</td>
</tr>
<tr>
<td>FY 18</td>
<td>4.5</td>
</tr>
<tr>
<td>FY 19</td>
<td>5.07</td>
</tr>
<tr>
<td>FY 20</td>
<td>5.19</td>
</tr>
</tbody>
</table>

- Hiltop
- Patulpani
- Total

Required number of Trucks/ Day for evacuation as per Mine Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Trucks</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 17</td>
<td>625</td>
</tr>
<tr>
<td>FY 18</td>
<td>938</td>
</tr>
<tr>
<td>FY 19</td>
<td>1056</td>
</tr>
<tr>
<td>FY 20</td>
<td>1079</td>
</tr>
</tbody>
</table>

# Total Number of Operational Days: 300 per year, Pay Load of truck: 16 tonnes
Status of Ore Evacuation in FY 17

Avg Daily no of trucks : 418
Ore Evacuation: 1.7 million tonnes

Need for the Project

With increasing production, it was essential to increase average daily number of trucks year on year to meet evacuation targets

Project Objective

Improving Truck turn-around time within the mine boundary (entry to exit)

- Improvements at each touch point of the truck’s journey (loading point, W/B, check points, etc.)
- Bringing in efficiency in the overall material flow so that bottlenecks are removed
# Executive Summary

- Gandhamardan Iron ore mine dispatches its iron ore (fines, lumps as well as CLO) through trucks supplied by Keonjhar District Truck Association (KDTA) for the buyers.
- KDTA does not own any truck – they only manage truck fleet owned by various truck owners, by liaising. Moreover, KDTA does not have any contractual obligation to supply minimum number of trucks to Gandhamardan Iron Ore mine.
- Ensuring supply of truck is managed by the buyers and the tagging is done by transporting organization.

## Pain Areas

- Variability in daily/hourly throughput
- Lesser number of ore evacuation days in a year
- Higher truck turnaround time
- Technology penetration has been sub-optimal

## Solutions and Actions

| Increase W/B uptime by implementing Preventive Maintenance Practice | • Identify Team for ensuring Regular W/B maintenance to minimize W/B breakdown  
• Develop Preventative Maintenance Checklist to be used before start of the shift |
| Increase Availability of truck during 06-09 AM slots | • Establish Parking lot to ensure overnight arrival of trucks for early morning loading  
• Carry out documentation work in parking to reduce congestion at entry gate |
| Adopt Hot Seat Arrangement system to improve Productivity during Lunch Hours | • Implementation of hot seat arrangement to factor in smooth transitions across shift and address issue of drastic productivity loss during lunch hours (01-03 PM slot) |

## Truck throughput – improvement trajectory

- Maximum Productivity has been achieved during January in time slot of 11 AM - 12 Noon
- In April to June, Avg throughput is 63 trucks/hr

<table>
<thead>
<tr>
<th>Effective Throughput realized between (1st April 17 to 31st March 2018)</th>
<th>Avg Throughput realized during working days and hours during 01 April 2017 to 31st March 2018</th>
<th>Maximum Hourly Throughput achieved</th>
<th>Potential throughput</th>
<th>Maximum Throughput throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>41</td>
<td>82</td>
<td>138</td>
<td>163</td>
</tr>
</tbody>
</table>

Throughput= Number of trucks evacuated per hour
### Suggested Solutions

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Solutions</th>
<th>Critical Success Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick Wins Solution</td>
<td>Preventive Maintenance Checklist for W/B</td>
<td>Training internal mechanical team to use the checklist</td>
</tr>
<tr>
<td></td>
<td>Training W/B Operators to improve their competency and efficiency</td>
<td>Skill and efficiency of operator</td>
</tr>
<tr>
<td></td>
<td>Talk to loading agency and ensure loader availability during morning slot (06AM-09AM)</td>
<td>Agreement and compliance from loading agency</td>
</tr>
<tr>
<td></td>
<td>Apply 5S principle to set-up the workplace</td>
<td>Workplace cleanliness, system uptime</td>
</tr>
<tr>
<td>Medium Term</td>
<td>Alternate Network Arrangement to remove Network failure</td>
<td>W/B downtown reduction</td>
</tr>
<tr>
<td></td>
<td>Increase in number of Security Personnel to manage traffic better</td>
<td>Reduction in truck congestion</td>
</tr>
<tr>
<td></td>
<td>Alternate power Arrangement supported by inverter to remove power failure at W/B and Server</td>
<td>W/B downtown reduction</td>
</tr>
<tr>
<td></td>
<td>Casing to the OFC to handle issue of OFC cable cut</td>
<td>Improve W/B uptime</td>
</tr>
<tr>
<td></td>
<td>Adopt Hot Seat Arrangement to ensure smooth transition during shift</td>
<td>Improve lunch time sudden drop in productivity</td>
</tr>
<tr>
<td></td>
<td>Layout at Hilltop Tare W/B to improve on cycle time</td>
<td>Improve process cycle time</td>
</tr>
<tr>
<td></td>
<td>Mobile Canteen to serve food, water at different location within mining lease area</td>
<td>Improve working conditions and no of working hours per day</td>
</tr>
<tr>
<td></td>
<td>Ensure uniform total truck entry across different time slots to minimize congestion</td>
<td>Securing co-operation from Truck Association</td>
</tr>
<tr>
<td>Long Term</td>
<td>Setting Up Parking Plaza at Gandhamardan Iron Ore Mine</td>
<td>Improve on truck availability and also control sudden congestion</td>
</tr>
<tr>
<td></td>
<td>Integrated Weighbridge management system to remove any manual data entry across ore evacuation chain</td>
<td>Remove manual process and improve cycle time</td>
</tr>
<tr>
<td></td>
<td>Process reengineering to remove non-value add activities from system</td>
<td></td>
</tr>
</tbody>
</table>
## Annexure – III: Sample Project Implementation Plan

### Implementation of Energy Savings Project at Bangur

<table>
<thead>
<tr>
<th>#</th>
<th>Activities, Stage 01</th>
<th>Responsible person</th>
<th>Designation</th>
<th>Start Date</th>
<th>End Date</th>
<th>Duration</th>
<th>Status</th>
<th>Major Milestone Achieved</th>
<th>Additional Support Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Survey to identify exact number of bulbs which have to be procured</td>
<td>N Kumar AK Swain</td>
<td>Dy. Manager (Mining) Dy. Manager (Electrical)</td>
<td>23-Sep-18</td>
<td>28-Sep-18</td>
<td>3</td>
<td>Completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Identify 2-3 agencies who would supply the bulbs and the equipment</td>
<td>AK Swain</td>
<td>Dy. Manager (Electrical)</td>
<td>28-Sep-18</td>
<td>08-Oct-18</td>
<td>10</td>
<td>In Progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Select agency based on Quality and Cost</td>
<td>AK Swain AK Tantil</td>
<td>Dy. Manager (Electrical) Dy. Manager (Geology)</td>
<td>08-Oct-18</td>
<td>15-Oct-18</td>
<td>3</td>
<td>Yet to Start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Get required approvals from RM before giving the contract to the agency</td>
<td>SK Nayak CS Mohanty</td>
<td>Sr. Manager (Personnel) Sr. Manager (Finance)</td>
<td>15-Oct-18</td>
<td>16-Oct-18</td>
<td>5</td>
<td>Yet to Start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Get required approvals</td>
<td>SK Nayak</td>
<td>Sr. Manager (Personnel)</td>
<td>15-Oct-18</td>
<td>14-Oct-18</td>
<td>1</td>
<td>Yet to Start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>Give contract to selected agency</td>
<td>SK Nayak AK Swain</td>
<td>Dy. Manager (Electrical)</td>
<td>15-Oct-18</td>
<td>16-Oct-18</td>
<td>2</td>
<td>Yet to Start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Overall installation</td>
<td>AK Swain</td>
<td>Dy. Manager (Electrical)</td>
<td>16-Oct-18</td>
<td>08-Nov-18</td>
<td>16</td>
<td>Yet to Start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Ensure bulbs of agreed upon specifications and Brand are provided on time</td>
<td>AK Swain SK Nayak</td>
<td>Dy. Manager (Electrical) Sr. Manager (Personnel)</td>
<td>16-Oct-18</td>
<td>23-Oct-18</td>
<td>7</td>
<td>Yet to Start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2</td>
<td>Return defective bulbs to supplier</td>
<td>AK Swain AK Swain AK Pandit</td>
<td>Dy. Manager (Electrical) Dy. Manager (Electrical)</td>
<td>23-Oct-18</td>
<td>01-Nov-18</td>
<td>9</td>
<td>Yet to Start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3</td>
<td>Assign bulbs to individuals</td>
<td>AK Swain</td>
<td>Dy. Manager (Electrical)</td>
<td>23-Oct-18</td>
<td>30-Oct-18</td>
<td>7</td>
<td>Yet to Start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4</td>
<td>Ensure installation and supervision</td>
<td>AK Swain D Tutu</td>
<td>Dy. Manager (Electrical) Manager (Geology)</td>
<td>23-Oct-18</td>
<td>31-Oct-18</td>
<td>8</td>
<td>Yet to Start</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annexure – IV: Discussions on QC Manual

1. QC Manual – Key Dates

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particular</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Draft QC Manual submitted</td>
<td>10th April, 2019</td>
</tr>
<tr>
<td>2</td>
<td>1st discussion on QC Manual with Steering Committee (SC) and QC members</td>
<td>25th May, 2019</td>
</tr>
<tr>
<td>3</td>
<td>2nd discussion on QC Manual with SC</td>
<td>7th June, 2019</td>
</tr>
<tr>
<td>4</td>
<td>3rd discussion on QC Manual with SC</td>
<td>26th June, 2019</td>
</tr>
<tr>
<td>5</td>
<td>4th discussion on QC Manual with SC, MR, PTLs and QC Members</td>
<td>5th July, 2019</td>
</tr>
<tr>
<td>6</td>
<td>5th discussion on QC Manual with Chairman, MD, SC, MR, PTLs and QC Members</td>
<td>11th July, 2019</td>
</tr>
</tbody>
</table>

2. QC Manual – Minutes of Meetings

i. First Discussion

Date: 25th May, 2019
Time: 3:30 PM To 4:30 PM
Venue: Mini Conference Room, OMC HO
Agenda: Discussion on QC Manual
Attendees:

<table>
<thead>
<tr>
<th>OMC</th>
<th>KPMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dr. Santanu Rath, Director (Personnel)</td>
<td>1. Mr. Bidyut Chakraborty, Team Leader</td>
</tr>
<tr>
<td>2. Mr. D. K. Mohanty, GM (Sales and Marketing)</td>
<td>2. Mr. Chandan Singh, Sr. BE Professional</td>
</tr>
<tr>
<td>3. Mr. Arun Balbant Roy, PTL</td>
<td>3. Mr. Faisal Rashid, Jr. BE Professional</td>
</tr>
<tr>
<td>4. Mr. S.R. Prasanjit, PTL</td>
<td></td>
</tr>
<tr>
<td>5. Mr. Subhakanta Jena, PTL</td>
<td></td>
</tr>
<tr>
<td>6. Mr. S.K. Nayak, PTL</td>
<td></td>
</tr>
<tr>
<td>7. Ms. Nilu Iraqi, PTL</td>
<td></td>
</tr>
<tr>
<td>8. QC Members</td>
<td></td>
</tr>
</tbody>
</table>

Key changes suggested in the QC Manual

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Constitution of Steering Committee</td>
</tr>
<tr>
<td></td>
<td>• The existing members of Steering Committee (MD and three Functional</td>
</tr>
</tbody>
</table>
2. **Categorization of Projects**
   - Potential improvement projects to be categorized into Category A, B & C
   - The criteria for grouping projects into Category A, B & C to be defined
   - It should be mentioned from which Categories QC can select improvement projects

3. **Annual Target for QCO**
   - Steering Committee would decide the target for each QCO in terms of number of improvement projects and High-Value projects at the start of every Financial Year

4. **Steering Committee to advise in selection of projects**
   - Steering Committee to guide Quality Circle Office (QCO) and Quality Circles (QCs) on selection of improvement projects and High-Value projects

5. **Approval from HO required before implementation of Solutions**
   - Approval from respective Sectional Heads at HO should be taken before implementation of solutions in QC projects
   - Approval should be provided by Sectional Heads in a time bound manner. If no response is obtained from Sectional Head within 15 days of sending the letter, the proposal from QCO would be considered ‘deemed approved’
ii. **Second Discussion**

**Date:** 7th June, 2019  
**Time:** 11:00 AM to 11:30 AM  
**Venue:** Director (Projects & Planning) Office  
**Agenda:** Evaluation of QC improvement Project  
**Attendees:**

<table>
<thead>
<tr>
<th>OMC</th>
<th>KPMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Santanu Rath, Director (Personnel)</td>
<td>Chandan Singh, Senior BE Professional</td>
</tr>
<tr>
<td>R. N. Praharaj, Director (Project &amp; Planning)</td>
<td></td>
</tr>
</tbody>
</table>

- During the Chairman Review Meeting held on 1st June 2019, it was decided to frame appropriate incentives for current cycle of 11 projects team that demonstrated their individual case studies at HO on 25th May 2019
- It was also decided to Shortlist projects for reward and recognition during OMC Annual day function

<table>
<thead>
<tr>
<th>Area</th>
<th>Key Discussion Points</th>
<th>Remarks</th>
</tr>
</thead>
</table>
| General Decision            | ▪ It was decided to provide **Certificate of Appreciation** to all 11 improvement project presented to OMC senior management at HO on 25th May 2019  
                             | ▪ It was also decided to identify top 03 projects across two categories- 1. Innovation and out of Box thinking  
<pre><code>                         | 2. Impacts of Project                                                               | Memento along with Certificate of Appreciation to be prepared |
</code></pre>
<p>| Financial Incentive         | Following were decided as Financial Incentive for top 03 projects.                   |                                                                        |</p>
<table>
<thead>
<tr>
<th>Rank</th>
<th>Incentive (per person in a team)</th>
<th>Maximum Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>INR 15000 (Fifteen Thousand)</td>
<td>INR 100000 (One Lacs)</td>
</tr>
<tr>
<td>02</td>
<td>INR 10000 (Ten Thousand)</td>
<td>INR 75000 (Seventy Five Thousands)</td>
</tr>
<tr>
<td>03</td>
<td>INR 7500 (Seven Thousand five Hundreds)</td>
<td>INR 50000 (Fifty Thousand)</td>
</tr>
</tbody>
</table>

**Top 03 Projects**  
**Category 01: Innovation and Out of Box thinking**  
**Rank**  
**Mine**  
**Project name**
### Category 02: Impact of Project

<table>
<thead>
<tr>
<th>Rank</th>
<th>Mine</th>
<th>Project name</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>GIOM</td>
<td>Throughput Improvement at GIOM using Preventive maintenance and installation of Jio-Fi to increase Weighbridge uptime</td>
</tr>
<tr>
<td>02</td>
<td>SKP</td>
<td>Improving ore evacuation in SKP through deployment of Online Challan System</td>
</tr>
<tr>
<td>03</td>
<td>Daitari</td>
<td>Remove bottlenecks in the Sales process at Baliparbat by improving voice and data network</td>
</tr>
</tbody>
</table>

### Next Step
- Felicitation for 6 selected projects across 2 categories will be done during OMC Annual Day function scheduled on 19th June 2019
- Schedule to be decided for presentation of top 03 projects across identified categories in front of chairman sir and MD sir

### iii. Third Discussion

**Date:** 26th June, 2019  
**Time:** 4:00 PM to 5:00 PM  
**Venue:** New Conference Hall, OMC HO  
**Agenda:** Discussion on QC Manual  
**Attendees:**

<table>
<thead>
<tr>
<th>OMC</th>
<th>KPMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dr. Santanu Rath, Director (Personnel)</td>
<td>1. Chandan Singh, Senior BE Professional</td>
</tr>
<tr>
<td>2. Mr. R. N. Praharaj, Director (Project &amp; Planning)</td>
<td>2. Faisal Rashid, Junior BE Professional</td>
</tr>
</tbody>
</table>
During the Chairman Review Meeting held on 1st June 2019, it was decided to discuss and finalize the contents of the QC Manual, including the reward and recognition scheme.

2 meetings on the QC Manual have been organized on 25th May, 2019 and 7th June, 2019. This was the third meeting being organized to discuss and finalize the contents of the QC Manual.

<table>
<thead>
<tr>
<th>Area</th>
<th>Key Discussion Points</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement Project Selection</td>
<td>Project scoring criteria should be defined so as to make it easier for QC members to assign scores for potential improvement projects</td>
<td>KPMG to make required changes in the QC Manual</td>
</tr>
<tr>
<td>Timelines for QC competition</td>
<td>Timelines for QC Competition to be inserted in the QC Manual</td>
<td>KPMG to make required changes in the QC Manual</td>
</tr>
<tr>
<td>Name of QC Competition</td>
<td>Name of QC competition to be changed</td>
<td>KPMG to make required changes in the QC Manual</td>
</tr>
<tr>
<td>Financial incentive</td>
<td>The following financial rewards have been agreed upon for the QC programme:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Facilitation allowance to be INR 500/ per project/month (Maximum of 2 projects at one time), in line with the allowance under SaHbhagita</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ QC competition at RO level to be held twice a year, at an interval of 6 months. The prize for winning competition at RO level to be:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ 1st Rank team: INR 10,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ 2nd Rank team: INR 5,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ 3rd Rank team: INR 3,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ QC Competition at HO level to be held once a year. Teams winning the competition at RO level to be eligible to participate in this competition. The prize for winning competition at HO level to be:</td>
<td></td>
</tr>
<tr>
<td>Ran k</td>
<td>Award Amount (INR)</td>
<td>Maximum Limit for team (INR)</td>
</tr>
<tr>
<td>1st</td>
<td>15,000 per</td>
<td>1,00,000</td>
</tr>
<tr>
<td>Training Initiatives</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td></td>
<td>person</td>
<td>members</td>
</tr>
<tr>
<td></td>
<td>10,000 per</td>
<td>Quality Circle Office (QCO) members</td>
</tr>
<tr>
<td></td>
<td>person</td>
<td>Project team members</td>
</tr>
<tr>
<td></td>
<td>75,000</td>
<td>QCO members</td>
</tr>
<tr>
<td></td>
<td>per person</td>
<td>Project team members</td>
</tr>
<tr>
<td></td>
<td>6,700 per</td>
<td>QCO members</td>
</tr>
<tr>
<td></td>
<td>person</td>
<td>Project team members</td>
</tr>
<tr>
<td></td>
<td>50,000</td>
<td>QCO members</td>
</tr>
<tr>
<td></td>
<td>per person</td>
<td>QCO members</td>
</tr>
<tr>
<td></td>
<td>7,500</td>
<td>QCO members</td>
</tr>
<tr>
<td></td>
<td>per person</td>
<td>QCO members</td>
</tr>
<tr>
<td></td>
<td>50,000</td>
<td>Project team members</td>
</tr>
<tr>
<td></td>
<td>per person</td>
<td>QCO members</td>
</tr>
<tr>
<td></td>
<td>5,000 per</td>
<td>Project team members</td>
</tr>
<tr>
<td></td>
<td>person</td>
<td>QCO members</td>
</tr>
</tbody>
</table>

- PTLs, along with the assistance of KPMG representatives, to organize training programs in different mines on QC concepts, tools and techniques
- List of personnel who have been trained in various QMS, EMS and other initiatives to be prepared. These personnel to provide training to other OMC employees across mines
- Internal Auditors to be provided the required trainings required to become Lead Auditor
- Training initiatives and Certification programmes as per the QC Manual to be classified under “Essential” and “Desirable” category

### iv. Fourth Discussion

**Date:** 5<sup>th</sup> July, 2019  
**Time:** 4:00 PM to 6:00 PM  
**Venue:** New Conference Hall, OMC HO  
**Agenda:** Discussion on QC Manual  
**Attendees:**

| OMC | KPMG |
- During the Chairman Review Meeting held on 1st June 2019, it was decided to discuss and finalize the contents of the QC Manual, including the reward and recognition scheme
- 3 meetings on the QC Manual have been organized on 25th May, 2019, 7th June, 2019 and 26th June, 2019. This was the fourth meeting being organized to discuss and finalize the contents of the QC Manual

<table>
<thead>
<tr>
<th>Area</th>
<th>Key Discussion Points</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening Committee (SC) Composition</td>
<td>• It may be considered if head of Materials Section should also be made part of SC in order to ensure approvals are obtained on time</td>
<td>KPMG to finalize after discussions with SC</td>
</tr>
<tr>
<td>Name of administrative body at site level</td>
<td>• Quality Circle Office (QCO) to be named as Quality Circle Unit (QCU)</td>
<td>KPMG to make required changes in the QC Manual</td>
</tr>
<tr>
<td>Financial Rewards</td>
<td>• Provision of providing financial rewards for High Value projects to be added</td>
<td>KPMG to finalize after discussions with SC</td>
</tr>
<tr>
<td>Involvement of Contractors/ Agency workers as part of project team</td>
<td>• Provision to be made for involvement of contractor/ agency workers as part of improvement projects and High Value projects  &lt;br&gt;• Provision of providing adequate rewards to be added</td>
<td>KPMG to make required changes in the QC Manual</td>
</tr>
</tbody>
</table>
Theme for QC projects

• SC can select themes for QC projects, and QC teams will ensure they take up projects according to the theme mentioned

KPMG to make required changes in the QC Manual

Project Categorization

• QC teams can take up Category C projects, provided Category A and Category B projects have been completed, and due approvals are in place

KPMG to make required changes in the QC Manual

Training Initiatives

• Training initiatives and Certification programmes as per the QC Manual to be classified under “Essential” and “Desirable” category

KPMG to make required changes in the QC Manual

v. Fourth Discussion

Date: 11th July, 2019

Time: 3:30 PM to 5:00 PM

Venue: Board Room, OMC HO

Agenda: Final Round of OMC QC Competition

Attendees:

<table>
<thead>
<tr>
<th>OMC</th>
<th>KPMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mr. Sanjeev Chopra, IAS – Chairman, OMC</td>
<td>1. Bidyut Chakraborty, Team Leader and BE Expert</td>
</tr>
<tr>
<td>3. Dr. Santanu Rath, Director (Personnel)</td>
<td>3. Faisal Rashid, Junior BE Professional</td>
</tr>
<tr>
<td>4. Mr. R. N. Praharaj, Director (Project &amp; Planning)</td>
<td></td>
</tr>
<tr>
<td>5. Mr. Satyajit Mohanty, Director (Finance)</td>
<td></td>
</tr>
<tr>
<td>6. Mr. D. K. Mohanty, CGM (Mining)</td>
<td></td>
</tr>
<tr>
<td>7. Mr. R. K. Dash, GM (Materials)</td>
<td></td>
</tr>
<tr>
<td>8. Mr. A. Sahoo, AGM (Production)</td>
<td></td>
</tr>
<tr>
<td>9. Mr. J. P. Pattanaik, MR &amp; DGM (Geology)</td>
<td></td>
</tr>
<tr>
<td>10. Mr. Sumit Sahoo, Sr. Manager (Personnel)</td>
<td></td>
</tr>
<tr>
<td>11. South Kaliapani QC</td>
<td></td>
</tr>
<tr>
<td>12. Daitari QC</td>
<td></td>
</tr>
<tr>
<td>13. GIOM QC</td>
<td></td>
</tr>
<tr>
<td>14. Barbil QC</td>
<td></td>
</tr>
</tbody>
</table>

○ A QC competition was organized at HO on 25th May, 2019 to identify the best QC projects. 11 teams were shortlisted to participate in the event before the Screening Committee at HO

○ Out of the 11 teams, 6 teams were selected across 2 categories: 1) Impact of the Project, 2) Innovation and Out of the box thinking
The 6 teams made a presentation to the Chairman and MD in the final round of OMC QC competition on 11th July, 2019

After careful considerations, the Chairman and MD decided as follows:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Key Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ranking</strong></td>
<td>The 6 participating teams were ranked across the two categories:</td>
</tr>
<tr>
<td>1) <strong>Impact of the Project</strong></td>
<td></td>
</tr>
<tr>
<td>Rank</td>
<td>Team</td>
</tr>
<tr>
<td>First</td>
<td>Gandhamardan QC</td>
</tr>
<tr>
<td>Second</td>
<td>South Kaliapani QC</td>
</tr>
<tr>
<td>Third</td>
<td>Daitari QC</td>
</tr>
<tr>
<td>2) <strong>Innovation and Out of the box thinking</strong></td>
<td></td>
</tr>
<tr>
<td>Rank</td>
<td>Team</td>
</tr>
<tr>
<td>First</td>
<td>South Kaliapani QC</td>
</tr>
<tr>
<td>Second</td>
<td>Khandbandh QC</td>
</tr>
<tr>
<td>Third</td>
<td>SBBK QC</td>
</tr>
</tbody>
</table>

| Reward | |
| The 6 teams would be felicitated during the OMC Annual Day celebrations |
| In order to provide a fillip/ boost to the QC movement in the initial/ formative stage, it was decided to declare an attractive financial reward to the winning QC teams as follows : |
| 1) First Rank – Each project team member to get INR 50,000 each |
| 2) Second Rank - Each project team member to get INR 40,000 each |
| 3) Third Rank - Each project team member to get INR 30,000 each |

Project team members to be rewarded will be as per letter issued by Director Personnel to RMs on 3rd July, 2019 (No. 10516/OMC/Persnl/2019)
### Review of QC Competition

- It was decided that the progress of the QC teams would be monitored by the Steering Committee at HO at the end of each quarter
- It was also decided to hold similar QC Competition every 6 months in order to recognize and encourage the work being done by the QC teams

### Replication of Success stories

- The QC teams would have to document their projects properly so that the learnings can be shared across OMC
- The success of QC projects need to be replicated in other mines of OMC to the extent possible
- Teams will visit various mines to demonstrate/show-case as to how they achieved success in their QC projects
3. Frequently Asked Questions

Q1) What is a Quality Circle?
Ans: A Quality Circle (QC) refers to a group of people, doing similar work, who meet at regular intervals to identify, analyze and solve work-related problems.

Q2) What is the Quality Circle programme in OMC?
Ans: Quality Circle programme in OMC is one of the two BE/ CIP initiatives (other being SaHbhapita) being implemented in OMC to embrace a culture of excellence in the organization. Herein, QC members identify improvement projects, and implement them after getting due approvals.

Q3) What is SaHbhapita?
Ans: SaHbhapita is employee engagement program (Employee Suggestion Scheme) intended to involve people working in and with OMC. It focusses on encouraging employees to share their ideas and suggestions to bring out improvement in OMC.

Q4) Who will identify improvement projects under QC programme?
Ans: QC members would select which improvement projects they wish to do. They may be advised by other OMC employees, but the final decision of project selection lies with them.

Q5) Who will work on Improvement projects?
Ans: QC Captain, along with project team members, will work on improvement projects. The project team members will be drawn from the same QC, and the list of project team members, along with the duration of their task, has to be mentioned in the project plan before implementing the project.

Q6) Who is a QC Captain?
Ans: Please refer to Clause 3.1.1. of this document.

Q7) Who can be QC members?
Ans: Any OMC employee who has the characteristics as mentioned in Clause 3.3.2.A. can be a QC member. Any interested employee can get in touch with the Facilitators or QC Captains of their regions, and they will guide them as to how they can become QC members.

Q8) What are High-Value projects?
Ans: Projects with intended benefits of more than 1 crore will be classified as High value projects. QCU will be directly responsible for implementation of High value projects, and progress of QCU projects will be monitored by CGM (Mining) from the SC.

Q9) Who will work on High-Value projects?
Ans: A High-value project would be led by a Facilitator. QCU will decide the project team members of a High-Value project.
Q10) Who is a Facilitator?
Ans: Please refer to Clause 3.1.2. of this document.

Q11) What is a Quality Circle Unit (QCU)?
Ans: Please refer to Clause 3.1.3. of this document.

Q12) What is Steering Committee (SC)?
Ans: Please refer to Clause 3.1.4. of this document.

Q13) How many improvement projects and High-Value improvement projects has to be done each year?
Ans: SC members will set the target for improvement projects and High-Value projects at the start of each Financial Year.

Q14) What are the rewards under QC programme?
Ans: Please refer to Clause 6 of this document.

Q15) What if I get transferred to a new location/site?
Ans: Please refer to Clause 3.3.4. of this document.