

**POINTS NOTED DURING THE ANNUAL INSPECTION OF GOC WORKSHOPS
GENERAL MANAGER ON 06.04.17**

1. A power point presentation on the performance of GOC Workshop was made. The workshop has surpassed the POH outturn of Diesel Electric locos and coaches during the current year despite increase in target over the last year. This tempo must be sustained.
2. The workshop has received Railway Board awards for best innovations for the year 2014-15 for the alternate design of CRF Hat section for BLC wagon and for 2015-16 for Anti-collision device to prevent collision of two cranes in same bay. This is commendable.
3. The Workshop has established various management systems and achieved IMS and ISO 50001 certification. Efforts must be made for continual improvements.
4. Efforts by the Workshop in Energy conservation, Green shield initiatives should continue.
5. The material cost for POH of coach during 2016-17(A/C – Rs. 9.39 Lakhs & Non A/C – Rs. 4.56 Lakhs) is less than that of 2015-16(A/C – Rs. 10.46 Lakhs & Non A/C – 5.10 Lakhs). The bookings for various heads of costing needs scrutiny. If required workshop can study the element-wise POH cost booked by Hubli workshops. Moreover, difference between POH and POH with major corrosion repair is less than expected.
6. The Modernization project started in the year 2007 is nearing completion. Under Mechanical portion, an amount of Rs. 53.7 crores has been so far booked against the sanctioned amount of Rs. 93.15 crores. The difference is mainly attributed to the reduction in the cost of TOS machine (Purchase cost is lower than the sanctioned cost by about 16 crores) and also since 80% payment has only been made so far. The balance 20% will be paid after commissioning of the machine.
- 6.1 Under the Civil & Electrical portion, most of the works have been completed. The maintenance works (Renewal of corroded pipe lines/providing of new pipe lines, Permanent Way works & improvement of existing drainage), sanctioned in the project at a cost of Rs. 1.66 crores have been transferred to open line. These works are yet to be taken up by open line and the Division should plan to complete this work at the earliest. DRM/TPJ and PCE should monitor for early completion of the work.

The Modernization project works should be completed before the end of the financial year 2017-18.

Assistance required by GOC Shop:

7. The allocations and the expenditure under Demand No.04430 for Civil Engineering assets is less. The utilization during the year 2016-17 is only Rs.80 lakhs. This is inadequate. This is required to be increased and monitored.
8. Presently, GOC shop is following waiver of 50% of proforma on cost, supervision & storage charges, profit margin and also the estimate preparation charges for deposit estimates for manufacture of wagons for CONCOR, duly obtaining the sanction of GM. However, this practice is not in vogue for POH of export of diesel loco. This requires a review.

Also committee of Finance and Mechanical Officers may be nominated to review the on costs so that the shop can remain competitive for undertaking deposit and RSP works.

9. At present, the Divisional staff of Engineering Department are involved in attending to Engineering works matters related to GOC shops. Normally, more time is taken to process the cases.

The workshop requires full-fledged independent team of Engineering staff for carrying out the maintenance of Engineering assets of Workshop similar to Carriage Works/ Perambur, as there is considerable delay in processing tenders and bill payments.

10. **Workshop Inspection:**

- 10.1 Inaugurated and inspected the new Chemical and Metallurgical Lab. An attempt has been made to integrate Metrology environmental lab, Chemical & Metallurgical Labs.

- 10.2 The environment lab has facilities to test various environmental parameters. These facilities can be gainfully employed for testing of samples for outside customers to generate revenue.

- 10.3 Brickets being manufactured out of paper and dry leaves to fuel the boiler for the canteen is an excellent effort. This concept can be replicated in the open line also.

- 10.4 The facility created for vermin-composting is generating about 150kg of compost per month. This is being utilized for developing the gardens in the workshop. Division can also make use of this.

- 10.5 In appreciation of the exemplary efforts put in by the staff, an award of Rs.5000/- was sanctioned.

11. Flagged off the 500th Diesel Electric Loco for Non Railway Customers (NTPC Korba). This effort towards overhauling PSUs locomotives has generated a revenue of about Rs. 471 crores cumulatively. This should be sustained.

12. The 5th BLC wagon rake of 2nd 1000 BLC order to CONCOR was also flagged off. As on date 3820 wagons have been manufactured for CONCOR and has generated a revenue Rs. 850 crores to the Railways earnings.

13. **Armoury Gate Tower clock:**

This Workshop has been maintaining a heritage tower clock commissioned in the year 1928. The effort of the Workshop in maintaining this age old clock is noteworthy. In appreciation a Cash award of Rs. 5000/- was sanctioned.

14. A shunting alarm designed and developed by the staff of GOC workshop was demonstrated. This device senses the movement of the Rolling Stock and triggers an alarm when the rolling stock is moved. This can also be used in open line shunting as the alarm will be continuously ringing when rakes are moved which will be cautioning the nearby personnel. An award of Rs.5000/- was sanctioned for this innovation.

15. **Diesel & Production Wings:**

- 15.1 Inspected DSL POH Shop –Dy.CME/Diesel briefed about the various activities carried out in DSL POH shop. Shop lay out, Outturn, Earnings through PSUs, Cycle time of POH and quality performance were displayed.
- 15.2 A Master Controller test stand has been designed and fabricated for EMD locos.
- 15.3 Engine Test Bed for GM locos on turn-key basis has been sanctioned under GM's OOT and indent has been placed on COFMOW for procurement. This must be expedited.
16. CWE/S.Rly explained the Modification carried out in Fuel Injection Systems to limit the injection at lower notches (i.e. upto 4th notch) in ALCO locos. At present, in lower notches the rack mount is not optimally damped and hence more fuel is injected. This leads to emission of thick black smoke. This problem was analysed in consultation with Medha Servo System and so far 15 locos have been turned out to various Zonal Railways. The Zonal Railways have not reported lower hauling power. The details may be advised to RDSO for standardising the modifications.
17. One overhauled HHP Power Pack for Tughlakabad Diesel Shed and a block undergoing repair attention were inspected. The overhauling of HHP power pack must be closely monitored.
18. A cash award of Rs.20,000/- for Diesel Shop was sanctioned.
19. GOC shop has to take up Mid-life Rehabilitation of EMD locos during 2017-18. It is understood that 7 locos are planned during 2017-18. Necessary spares must be ensured for quality work.
20. Various activities carried out by Engine Block Reclamation Shop was explained. Quality issues due to old machines were discussed. This is required to be expedited.
21. Inspected floor type travelling column CNC horizontal boring and milling machine. It was informed that this machine can undertake all machining operations for reclamation of both ALCO and HHP engine blocks Commissioning of the machine must be expedited.

22. **Erecting Shop:**

- 22.1
- Movement of off-POH 'X' Class steam loco 37396 was demonstrated utilizing the Loco Pilot of NM Railway.
 - In appreciation of the efforts in maintaining the heritage locos of NM railway successfully, a cash award of Rs. 20,000/- was sanctioned.
 - Sanctioned an award of Rs.1000/- to Shri Udaya Shankar, LP/Goods/ONR of SA Division.

23. **Coaching Wing:**

- 23.1 Inspected the off-POH AC coach No.WGACCN 12135. Improvements made in refurbishing of toilets in this coach were noteworthy. Only moulded type head rest must be used to avoid pest complaints.

24. The interior furnishing and exterior painting of this coach was found to be satisfactory.
25. Status of installation of bolted design bio tank was explained. The workshop has fitted 640 bolted design bio tanks during 2016-17.
26. For the good work done in exceeding the targeted out turn of coaches during the previous fiscal, an award of Rs.25,000/- was sanctioned for the Carriage POH Shops.
27. **Wagon Wing:**
 - 27.1 Inspected stainless steel BOXNHL Wagon No. ECoR 22121632458 that was ready for despatch. Use of lock bolts in manufacture of BOXN HL wagon was explained.
28. The 2nd 1000 BLC wagon order has been modified by CONCOR as 495 nos. of BLC order and 505 nos. of 25 T axle load BCS wagons. GOC shops has manufactured the proto-type BCS under frame and is waiting for bogies. This is a good effort and must quickly be completed.
29. In appreciation of good work done by the wagon wing, a cash award of Rs 20,000/- was sanctioned.
30. A group cash award of Rs.40,000/- was sanctioned for the staff of Stores, Accounts, Personnel, Engineering and Security Departments for their contribution to the overall good performance of GOC workshop.
31. The workshop has maintained excellent quality standards and has been continuously exceeding its targets combined with excellent housekeeping and cleanliness. This commendable effort should be sustained and the workshop should strive for continual improvement.
32. The representations received during the inspection have been sent to departments concerned for necessary action.
