

SUB: Observations and Recommendations - Visit of Inder Mine and Durgapur Mine

This is in reference to visit of undersigned to Inder mine of Nagpur area on 11-Mar-2022 and to Durgapur mine of Chandrapur area on 16-Mar-2022. The visit report of these two mines are enclosed herewith. However, the salient observations and recommendations common to both the mines and also specific to these mines are as below for kind consideration and suitable necessary action please.

1. IT initiative system has not been found functional properly and adequately. RFID reader was not operational at boom barrier of Inder mine, route or speed violation not being monitored at Inder and Durgapur under technical issue for the last 7-8 months, camera at all vulnerable points particularly at coal loading points not found available etc. **Although a letter in respect of shortcoming in IT related systems has already been sent from undersigned vide letter no. 361 dated 29.03.2022 (copy enclosed) for needful action with few recommendations, administrative action also for lapses need to be taken by management suitably, along with strengthening of monitoring mechanism at HQ.**
2. The manual operation of boom barrier be stopped immediately across any boom barrier in WCL as there is no event recorded in the system for such use. **Under no circumstances, manual switch be allowed to operate boom barrier.**
3. The RFID card issued are found of two types one affixed to vehicle (termed as permanent type in field) which contains certain information about vehicle etc. and another temporary card type. The use of temporary card is found very frequent with no monitoring. No entry is recorded anywhere against use of temporary RFID card which does not contain any information against this card except card issued particulars in the system. The no. of times a temporary card can be used by security personnel is also not found available in the system and a matter of serious concern. As no other information is automatically recorded in the system against temporary card and use also is not limited, it becomes more vulnerable. **Therefore, the use of temporary RFID card needs to be minimised immediately. It may only be allowed to use if so required after recording complete details in the register by authority using it, which must also be checked by nominated executive on daily basis till effective use of these cards are incorporated in the system.**
For effective and proper use of these cards, a group of technical experts in WCL may be formed to examine within a week about what other information is to be made mandatory for registration of a temporary RFID card in system before issue, no. of times it can be used, who can use it and what other information which are required to be recorded which are not being transmitted automatically. The purpose is to have complete record of vehicles passed/allowed by any RFID card either permanent or temporary, in the system for effective monitoring and subsequent examination. The working of such system in SECL may also be studied by the committee as the IT system in SECL was found appreciated in one of the review meeting.
4. The CCTV/PTZ cameras as already pointed out earlier, be ensured that at all coal loading points without any hinderance are covered and also with proper backup. Possibility of using artificial intelligence software/tool for monitoring CCTV footage

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for any suspicious activity may also be explored on pilot basis in a most theft prone mine.

5. The coal transportation from face to stock and CHP in Inder mine is through contractual mechanism, where 100% coal weighment is required. But the coal weighment for all the trips are not found done despite functioning of two weighbridges (third weighbridge was reported under breakdown). There was no defined mechanism to know which dumper to go to CHP and which to go to stock and with or without weighment. There were two types of dumpers, one with approximately 40 Te net carrying capacity and other around 25 Te net carrying capacity, however in production reporting, truck weighed were not taken in to cognizance and some other figures as found mentioned casually in one of the registers at weighbridge for number of trips with trip factor as 25 is being taken to report production. It is matter of serious concern and vigilance unit has been asked to investigate it separately. ***In all HOE patches, 100% weighment and production reporting by weighment only, be considered and necessary direction be issued accordingly.*** Technical possibility of unmanned weighbridge operation for this job may also be explored.
6. In Durgapur, coal transportation from face to stock is through departmental dumpers, however dumpers with PLMS facility are not being deployed completely for this purpose. It is recommended that in coal transportation from face to stock, dumpers with PLMS facility be used as far as possible and weighbridge installation for weighment of coal being transported from face to stock by departmental mechanism be also expedited. Further mine management was not found aware about PLMS feature despite so much correspondence from CIL and WCL vigilance in this regard. Mine management may be advised to see and use the PLMS feature embedded in the dumpers effectively.
7. SOP issued by CIL for weighbridge in Apr-2021 categorically specifies about check of weighbridges with minimum 25% weight at every three months. However, it was reported in past also and found in these two mines that mine authorities did not have requisite weight at site and such check is reported being done with 10-12% weight hardly. No sincere efforts found made by any authority to have sufficient weight and comply the SOP guidelines in this regard. It was also astonishing that Chandrapur area management could not arrange 25 Te weight when asked to check one of the weighbridges with 25 te weight during visit on 16-Mar-2022. ***Therefore, management may like to reiterate the guidelines to field to ensure the same, apart from taking administrative action as deemed fit for the lapses considering weighbridge operation, a sensitive matter. Respective HQ unit may also be directed to check the compliance of SOP in this regard whenever they visit field units. In fact, defined scheduled visit by HQ team as deemed fit may be considered and necessary direction in this regard be issued.***
8. The road conditions inside mine particularly from stock to siding at Durgapur was in very pathetic condition. Needful in this regard may be considered please.
9. While going from guest house at Durgapur to view point/stock in Durgapur mine, we did not come across any check post/boom barrier and a matter of concern. Although

area management was directed there itself for having proper check post for entering in mine, same need to be ensured for compliance please.

10. Selling of steam and slack coal side by side at Nandgaon is vulnerable in absence of any auto mechanism to stop loading from other point. Therefore, management may like to consider issuing of D.O. for steam coal only and transportation of slack coal filtered from unit to siding as crushed coal.


CVO WCL 6/7/22

CMD WCL

INSPECTION REPORT OF INDER OC

In order to check efficacy of various IT initiatives implemented in WCL, an inspection was done at Inder Kamptee OC Mine of Nagpur Area on 11-03-2022 by CVO WCL. The undersigned alongwith Shri K.C.Bansod, CM(Sys)/Vig accompanied CVO WCL.

(a) VIEW POINT :

The Team first visited Inder OC view point to understand the route taken for coal transport by HoE Tippers from face to stock. It was observed that no PTZ / CCTV camera was installed which could monitor the movement of tippers for transportation of coal face to stock.

(b) Inder Weighbridge of 100 T Capacity :

- (i) At present two weighbridges at Inder 100 MT & 50 MT capacity are installed. The 100 MT weighbridges which was adjoining the Manager's Office was being used on the date of inspection. The CCTV camera installed at the weighbridge was found not functioning. It was also observed that there was no camera installed inside the weighbridge cabin as mandated in SOP. The joint box of the cables coming out from load cells was not sealed. The House Keeping and maintenance of weighbridge cabin was not satisfactory.
- (ii) During consultation with Staff Officer (E&T) it was observed that the checking of weighbridge with standard weight (25% of weighbridge capacity) which is mandated at every three months, was not being done and the checking is found with only 10% weight. This is violation of CIL SOP dated 22-04-2021. The camera was also not covering whole of the weighbridge truck movements. The weighbridge repair / maintenance register was not being signed by any officials of Inder OC Mine though it was informed that the Colliery Engineer was Incharge for the same.
- (iii) Though, two weighbridges had been installed, many HoE tippers transported coal from face to stock were not being weighed.
- (iv) In ERP, while reporting it is being mentioned as no weighment for this HoE patch. Therefore, there is no relevance of HoE weighment. The coal production reporting is found based on rough calculation. Shift wise proper accounting for weighment & no weighment trucks, are not found maintained.

In weighment, two type of trucks were found, one with net 40 Te and other net 25 Te, however, as reporting in ERP is not at all related to weighed trucks. The reporting is based on trip factor only, the basis of which is not known as no trip count is even being furnished by contractor. A separate enquiry is being conducted in this regard pertaining to payment where HoE patch weighment is shown.

(c) Inder Coal Stock :

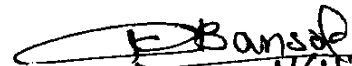
- (i) Seven Pay Loaders of various consumers were found in the coal stock at Inder OC. The Mine management could not reasonably justify the reasons for allowing several numbers of Pay Loaders in the mine premises.
- (ii) Road Sale trucks were being loaded only from fresh coal being dumped by HoE tippers. All the consumers had been allotted different loading points in the stock.
- (iii) PTZ / CCTV camera was found installed at the stock but it was not covering whole of the stock yard.

(c) Check Post :

RFID Reader at exit was not functional and Boom Barrier was being operated manually. CCTV camera was not found installed in a proper way so as to cover movements of vehicles entering and leaving the mines. The mine management could not provide the numbers of route violation for the past one month.

(Anup Hanjura)
General Manager (Vig.)

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4/4/2022


(K.C. Bansod), 17/4/2022
Chief Manager (Sys.)/Vig.


CHIEF VIGILANCE OFFICER

INSPECTION REPORT - CHANDRAPUR AREA

1. An inspection of Chandrapur Area was done on 16-03-2022 by CVO WCL, who was accompanied by undersigned and Shri K.C. Bansod, CM(Sys)/Vig. Inspection of Durgapur OC was done to check the working of various IT initiatives implemented at the mines. The entry upto view point of Durgapur OC Mine from the guest house was without any check post, and a matter of serious concern.
2. Coal transportation route from face to stock was observed from the view point of Durgapur OC. PTZ cameras were not found installed to cover the movement from coal face to coal stock.
3. Coal stock of Durgapur OC was also inspected. The CAT make dumpers which were transported coal from face to Stock, were inspected for functioning of Pay Loaded Management System (PLMS) . Though PMLS system was installed, no reported / retrieval of data was being done through it. The production reporting in the mine was based on multiplying the trip factor with no of trips loaded, the authenticity of which cannot be commented upon.
4. Weighbridge installed near the exit point of the mine was inspected. It was found that check of weighbridge with minimum 25% weight at every three months (as per SOP No.CIL/E&T/IT Initiatives/2021/753 dated 22-04-2021 Clause No.2 under the head 'Operation and Maintenance') was not being done. It was found that check was being done with only 10 to 12% standard weight. Mine Management informed about unavailability of weight at one place. This is in violation of SOP dated 22-04-2021. Further the Area was asked to get a test check with 25% weight done for this weighbridge during inspection. However, the area expressed in its inability to get it done. This is a matter of serious concern and management may like to take suitable action as deemed fit.
5. At the Durgapur entry 100 T weighbridge, it was advised that an analysis be made for the time taken by the tippers to complete one cycle and make use of IT tools in order to track any anomalies which may occur during transportation of coal.

6. The departmental crusher (Good Luck Crusher) was also inspected and it was observed that the coal being transported from Durgapur OC to this crusher by ESM Agencies. The condition of Road from stock to crushing unit is very bad and need immediate attention of management.
7. The Central GPS / Geo-fencing / CCTV Monitoring Control Room at GM Office, Chandrapur Area was inspected and it was observed that proper installation of PTZ / CCTV cameras at stock were needed to ensure complete coverage. Violation of route / speed were not being monitored by area citing technical issue for the last 8 months. This is matter of concern and need immediate action by HQ. It was suggested to make use of artificial intelligence tools so that appropriate alerts can be generated in case of diversion / coal theft being recorded in the CCTV / PTZ cameras.
8. On asking to control room Staff / area management, whether total number of vehicles allowed in mine as on date can be provided immediately through any tools on which control room / area office expressed its inability.
9. Nandgaon Incline coal dispatched point (CHP) where steam and slack coal is loaded was also visited. There is no proper mechanism found for stopping of loading of steam coal against D.O. of slack coal. There is a need to issue D.O. of only steam coal if so required and remaining slack coal as crushed coal to siding in order to avoid any incidence of selling steam coal in place of D.O. of slack coal and leakage in revenue Management may like to review & take appropriate action.


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