

EAST COAST RAILWAY
WALTAIR DIVISION

No.WTF/5/SWR/BCHL

Date of issue:

Date brought into force:

Ref.Lr.No.2000/Safety (A&R)/19/36 of Rly. Board dt.27.10.05.

STATION WORKING RULES OF BACHELI STATION
(BROAD GAUGE)

NOTE: The Station Working Rules must be read in conjunction with General and Subsidiary Rules, Block Working Manual and Operating Manual. These rules do not in any way supersede any rules in the above rule books.

1. STATION WORKING RULES DIAGRAM:

- i) Station Working Rule Diagram No. : SI 23035 ALT 'B'
ii) CSTE/E.Co.Rly/DRG No. : SI 23035 ALT 'B'
iii) Date up to which corrected :

2. DESCRIPTION OF STATION:

2.1 a) GENERAL (LOCATION):

i)	Name of the Station	:	BACHELI
ii)	Class of Station	:	'B'
iii)	Section	:	Koraput – Kirandul
iv)	Double/Single line	:	Single Line
v)	Electrified/non electrified	:	Electrified
vi)	Guage BG/MG/NG	:	BG
vii)	Railway	:	East Coast Railway
viii)	Route	:	'D'
ix)	Situated at KM	:	436.455 KM
x)	From	:	Kottavalasa
xi)	No. of Cabins	:	2 end cabins one at east end with 35 levers and the other at west end with 35 levers. One cabin with 42 IRS direct type lever is situated at R&D yard.

2.2 BLOCK STATIONS, IBH, IBS ON EITHER SIDE AND THEIR DISTANCE AND OUTLYING SIDINGS:

a)

Adjacent block Station	Distance	Direction
BHANSI	9.546 KM	East
KIRANDUL	9.143 KM	West

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- b) Provision of IBS : Nil
- c) Automatic Signals : Nil
- d) DK Stations/ Outlying Sidings : Nil

2.3 BLOCK SECTION LIMITS ON EITHER SIDE OF THE STATION ON DIFFERENT DIRECTIONS:

Between Stations	The Point from which the “Block Section” Commences	The Point at which the “Block Section” ends.
BCHL-BHNS	Dn Advanced Starter No.22E of BCHL	Up Advanced Starter of BHNS
BCHL-KRDL	Up Advanced Starter No 18W of BCHL	Dn Advanced Starter Signal of KRDL

2.4 GRADIENTS IF ANY

Gradients from the centre of the Station Building towards KRDL

Sl.No	Chainage		Inter distance	Gradient
	From	To		
1.	0.00 M	700.30 M	700.36 M	1 in 400 Falling
2.	700.30 M	2012.10 M	1311.70M	1 in 150 Falling
3.	2012.10 M	Into section	1324 M	Level

Gradients from the centre of the station building towards BHNS

Sl.No	Chainage		Inter distance	Gradient
	From	To		
1.	0.00 M	530.00 M	530 M	1 in 400 Raising
2.	530.00 M	780.00 M	250.00 M	Level
3.	780.00 M	3994.00 M	3214 M	1 in 80 Raising
4.	3994.00 M	Into Section		Level

2.5 LAYOUT:

A) Running Line:

a)	Line No 1 (1 st loop)	:	Electrified
b)	Line No 2 (Main Line)	:	Electrified
c)	Line No 3 (2 nd loop)	:	Electrified

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d)	Uniflow Reception line	Electrified
c)	NMDC line to Reception yard	Electrified

B) **Platform:**

One Rail Level passenger platform on line no-1 is available.

2.5.1 RUNNING LINES - DIRECTION OF MOVEMENT AND HOLDING CAPACITIES:

The following are running lines with the holding length of:

1 st loop line	690 M	(CSL)
Main line	690 M	(CSL)
2 nd loop line	822 M	(CSL)
Uniflow Reception line	1318 M	(CSL)
NMDC line to Reception Yard.	1002.5 M	(CSL)

DIRECTION OF MOVEMENT:

The trains coming from BHNS and proceeding towards KRDL are Up trains. The trains coming from KRDL and proceeding towards BHNS are Dn Trains.

2.5.2 NON RUNNING LINES AND THEIR CAPACITY:

The following are the sidings at this station and their description and working is shown as below

i) **NMDC Siding**

NMDC siding taking off from line No.3 i.e. 2nd loop. Siding entrance point and corresponding derailing switch are coupled and operated by an arc lever provided at site. Hand plunger locks fitted at the entrance points are operated by a key released from lever No.16(W) & 16(E) at their respective end in reverse position. When lever No.16(W) or 16(E) in reverse position, the up and down reception and dispatch signals for line No.3 held locked in normal position.

ii) **TEMPORARY ENGINEERING SIDING:**

Temporary Engineering siding takes off from the entry line of BCHL terminal yard at East end and terminate into a dead end. It is isolated by a derailing switch operated by a ground lever provided at site. The hand plunger locks fitted for this point is operated by a key released from lever No.26 of East cabin in its reversed position.

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When lever No.26 is in its reversed position, the Up home signal No.7E starter signal No.31E and slot lever No.32E controlling the movement over the entry line will be held locked in their normal position.

2.5.3 ANY SPECIAL FEATURES IN THE LAYOUT:

a). SLIP SIDING:

Slip siding No. 8E is at Ch. No 727.00 KM is directly operated from East Cabin. is normally set to slip.

The slip siding point is required to be set to running line for reception of an Up train, or to dispatch of a down train or to perform shunting towards BHNS section after duly blocked back. The slip siding point No.8E and uniflow point No.27 E are interlocked with the block instrument of BCHL-BHNS section, so that it will not be possible to set the slip siding point and uniflow point No.27 E to running line unless the handle of the block instrument is either in 'TRAIN GOING TO' or "TRAIN COMING FROM" position. Similarly the handle of the block instrument cannot be made normal unless the slip siding point and point No.27 E are set to its normal position..

b). UNI FLOW UP RECEPTION LINE:

Uniflow Up reception line is taking off from main running line at Ch. No. 1530.50 M through Cross-over no. 27E. The line is provided to receive up trains from BHNS. The line is isolated by providing over-run line. The detailed procedure of admission of train on Uniflow line is described in Appendix.-'H', item No.6.01.4 of this SWR.

c). NMDC LINE TO RECEPTION YARD:

The NMDC line to reception yard of BCHL is taken off from PT CH. 712 M of main line at BHNS end through cross over No. 29EA & 29EB. The line is provided for reception of train from BHNS end to RYD and dispatch of train from RYD to BHNS end. The line is isolated by DS point No.26(E). The detail procedures are described in Appendix "H" item no. 6.1 & 9.0 of this SWR.

2.6 LEVEL CROSSING GATES:

Nil

3.0 SYSTEM AND MEANS OF WORKING:

a). Trains are worked under Absolute Block System in accordance with GR 8.01(1)(a)(c), 8.01(2)(b), 8.03(2)(b)(ii), 14.01 to 14.08, 14.10, 14.12, 14.13 and BWM Chapter-IV Part-II in either direction.

b). BLOCK INSTRUMENTS:

Daido type single line token-less block instrument are provided for Block sections BCHL-BHNS and BCHL-KRDL vide GR 14.01 and the instruments are of co-operative type .Block telephone attached to respective block instrument for communication with SM at either end of the section.

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4.0 SYSTEM OF SIGNALING AND INTERLOCKING:

4.1	Standard of interlocking	Standard I
	Type of signaling	MACLS
	Operation of signals and points	There are two cabins at the station for operating points, point locks, holding bars, signals, fouling bars, slots and siding controls at the respective ends. East cabin has 35 levers and West cabin has 35 levers. These cabins are manned by leverman. The SM is provided with an electrical slide control machine (with 12 Nos of slides) to control all Up and Down reception signals and the last stop signal of different direction. This slide control machine is provided with locking arrangement and can be locked with all slides on normal condition or one or more slides in pulled condition. The key of the slide control machine must be in the personal custody of SM on duty Vide SR 3.38.03(a)
	Track Circuits	<ul style="list-style-type: none"> i) 33T inside Up home signal. ii) 22T point zone track circuit . iii) 27AT point zone track circuit . iv) 27T point zone track circuit. v) UN1T2 & UN1T1 over the up reception uni flow line. vi) 3T track circuit for replacement track for signal No.3E. vii) 4T1 between signal no. S 4/5/6/7E and Fouling Mark of point No.27 EA. viii) 4T inside Up inner Home S4/5/6/7E ix) 29 AT on point zone of motor point 29A. x) 29 BT on point zone of motor point 29B. xi) 18T1, 18T2 between Down home signal and Up last stop signal. xii) 18T Down home signal.

4.2 CUSTODY OF RELAY ROOM KEY AND PROCEDURE FOR ITS HANDING OVER AND TAKING OVER BETWEEN STATION MASTER AND S&T MAINTENANCE STAFF:

Relay room is provided with two independent locks, the key of one lock shall be in the custody of Station Master on duty and the key of other lock shall be in the custody of S&T maintainer. In the event of necessity such as for attending failure or regular maintenance, on being requisitioned by S&T Maintainer, SM shall handover the key to the Maintainer. On completion of the work, maintainer shall lock the relay room and shall return the key to SM. The particulars of such transaction shall be entered by the SM on duty in the Relay room Key Register vide OM 1.14.

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4.3 POWER SUPPLY:

Normal power supply source is drawn from AT supply.

Standby power supply source is drawn from CGSEB local power supply.

5.0 TELECOMMUNICATIONS:

- i) Telephone attached to token less block instrument is connected to adjacent block station on either side.
- ii) The station is connected to KRPU-KRDL control circuit.
- iii) The station is connected to WAT-KRDL traction Loco control circuit.
- iv) The station is connected to KRPU-KRDL traction power control circuit.
- v) Station-to-station telephone (magneto) is connected to adjacent block station on either side.
- vi) The station is provided with 25 watt Simplex V.H.F set.
- vii) Telephone communication provided between SM's office and end cabins at either end.
- viii) Telephone communication provided between SM's office and 'A' cabin.
- ix) BSNL telephone is provided.
- x) Railway Auto telephone is provided.
- xi) NMDC Auto telephone is provided.
- xii) Telephone communication is provided between East Cabin and Goomty.

5.1 ACTION IN THE EVENT OF FAILURE OF TELEPHONE COMMUNICATIONS:

- a) During partial interruption of communication between the adjacent block stations SR 6.02.06 shall be observed.
- b) During total interruption of communication between the adjacent block stations SR 6.02.04 shall be observed.
- c) In the event of failure of telephone communication between SM's office and cabin the communication shall be restored to as per OPM 20.04(8)(g)

6.0 SYSTEM OF TRAIN WORKING:**6.1 DUTIES OF TRAIN WORKING STAFF:**

The duties of train working staff are mentioned in detail in Appendix 'D' of this SWR.

6.1.1 TRAIN WORKING STAFF IN EACH SHIFT:

Complement of staff		Staff working in each shift	
Station Manager	1	Station Manager	1 (Spervising)
Station Master	4	Station Master	1

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TNC	3	TNC	1
Roster Clerk	1	Roster Clerk	1 (General Shift)
LMA/TPMA	14	LMA/TPMA	3
TPM/TP	17	TPM/TP	4
SCLM	1	SCLM	1 (General Shift)
STJM	4	STJM	1
YM	4	YM/AYM	1

Note: Staff deployed at the station shall follow the rosters issued by DPO/WAT from time to time.

The duties of operating staff at the Station are incorporated in Appendix 'D' in the SWR. (Staff deployed for auxiliary yard is given in Appendix 'H').

6.1.2 RESPONSIBILITY FOR ASCERTAINING CLEARANCE OF THE LINES AND ZONES OF RESPONSIBILITY:

- a) From the concerned home signal upto the facing end fouling mark of the nominated line, facing end cabinman is responsible.
- b) From the fouling mark at facing end to the fouling mark at the trailing end of the nominated line, station master on duty is responsible.
- c) From the fouling mark at the trailing end of the nominated line upto and including the adequate distance as per GR 3.40(1)(b), trailing end cabinman is responsible.

N.B.

However, the SM on duty and the Cabinman shall always be alert and watchful of any obstruction on any part of the line irrespective of zones under their responsibility.

6.1.3 ASSURANCE OF STAFF IN THE ASSURANCE REGISTER:

Any staff before taking of independent charge of duties connected to train working or any staff who is away from his duty for the period of 15 days or more shall sign in the Assurance Register in token of having understood the contents. However, in the event of any corrections or modification in the SWR is involve the assurance of all the staff who ever is entrusted the work of trains passing duty shall be obtained a fresh in the Assurance Register by the In-charge of the station before they are allowed to work vide SR 5.01.02.

6.2 CONDITIONS FOR GRANTING LINE CLEAR:

- a) The trains are worked under Absolute block system with single line working and MACLS vide GR 7.01(1)(a) & 8.0
- b) The conditions laid in GR. 8.01(1)(a) & (c), 8.01(2)(b), GR 8.03(2)(a)(b) & (ii), GR 14.10 & BWM Ch-IV Part-II must be complied with before the line is considered clear and line clear is granted to the block station in rear for a train by the SM on duty.
- c) Line shall not be considered clear and line clear shall not be granted to any Up train unless whole of the last preceding Up train has arrived complete, Up Home signal 4E/5E/6E/7E put back to On and line is clear up to Dn Advanced Starter No.22E

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- d) Line shall not be considered clear and line clear shall not be granted to a Dn train unless whole of the last preceding Dn train has arrived complete, Dn Home signal No. 4W/5W/6W put back to On and line is clear upto Up Advanced Starter No.18W.

6.2.1 ANY SPECIAL CONDITIONS TO BE OBSERVED WHILE RECEIVING OR DESPATCHING A TRAIN:

6.2.1.1 SETTING OF POINTS AGAINST BLOCKED LINE:

When a running line is blocked by a train stabled load, wagon, Vehicle or by a train which is to cross or give precedence to another or immediately after the arrival of the train at the station the points. It either end on single line section should be immediately set against the blocked line except when shunting or any other movement is required to be done immediately in that direction, on that line vide GR3.38(2) lever / block collars placed on the concerned lever / button of the blocked line vide SR 3.38(2), 5.04.01 and SR 3.51.06 shall be followed.

6.2.1.2 RECEPTION OF TRAIN ON BLOCKED LINE:

- a) In case of reception of a train obstructed line the station master shall sent the written permission referred in GR 5.09 (2)(c) on form T/509 and shall endorse the reason for such admission, the line number and the nature of obstruction on that line.
- b) Setting and locking of points shall be done as per SR.3.69.03.
- c) A stop hand signal shall be exhibited by the station master/ cabin man personally at a distance of not less than 45 mts from the point of obstruction to indicate to the loco pilot as to where the shall be brought to a stand.

6.2.1.3 RECEPTION OF TRAIN ON NON-SIGNALLED LINE:

Whenever a situation warrants reception of trains on a non signaling line is governed by GR 5.10 & SR 5.10.01.

6.2.1.4 DESPATCH OF TRAIN FROM NON-SIGNALLED LINE:

Dispatch of trains from non signaled line is governed by GR 5.11 & SR 5.11.1

6.2.1.5 DESPATCH OF TRAIN FROM LINE PROVIDED WITH COMMON STARTER SIGNAL:

Dispatch of train from line provided with common starter signal is governed by GR 5.12 & SR 5.12.01.

6.2.1.6 ANY OTHER SPECIAL CONDITIONS:

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(A) SPECIAL RESTRICTIONS:

- i) Shunting in the face of an approaching train is governed vide GR 8.09 and relevant SRs.
- ii) Hand shunting is governed by GR 5.20.
- iii) Fly shunting is prohibited vide SR 5.21.01(c).
- iv) The over run line or sand hump must not be used for stabling of vehicles or harboring an engine with or without vehicles SR 3.40.01
- v) Shunting at either end of the station is governed by GR 5.20 & SR thereto.
- vi) Ballast/Material train shall not be allowed to be pushed into block section BCHL-KRDL and BCHL-BHNS.

(B) SPECIAL INSTRUCTIONS:

- i) Before admission of a train, the clearance of over run line/Sand hump shall be ensure even though the same falls in trailing direction.
- ii) Whenever it is necessary to carry any shunt movement from main yard to terminal yard or vice-versa, the block section BCHL-BHNS to be blocked back. A competent Railway servant has to supervise such shunting, giving correct authority to Loco Pilot. In case the block instrument is suspended the crank handle to be used to set the slip siding motor point, recording the transactions in the register meant for it in accordance with the Operating Manual.
- iii) On duty SM is responsible for nomination of a free line of loading yard. He shall ensure about the proper setting, clamping and pad locking of the required hand points enroute leading to the nominated line. under exchange of private No. with yard master of loading yard and then extend slot no.2 to east cabin for taking of signal number 34E for movement upto the Stop board of nominated line..

6.3 CONDITIONS FOR TAKING 'OFF' APPROACH SIGNALS

- i) For taking 'OFF' Home signal the conditions vide GR 3.40, SR 3.40.01 &SR 3.40.02 shall be observed.

The Home signal overlaps for admission of trains in terms of GR 3.40(1)(b) & 3.40(3)(b).

LINE NO.	CLEARANCE OF ADEQUATE DISTANCE			
	FOR UP TRAINS		FOR DOWN TRAINS	
	FROM	TO	FROM	TO
1 st loop (line No.2)	Starter No.20 W	The end of sand hump	Starter No.19 E	Down advanced starter No.18 E
Main line (line No.3)	Starter No.21 W	Up advanced starter No.18 W	Starter No.21 E	Starter No.18 E

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2 nd loop (line No.4)	Starter No.19 W	The dead end of over run line	Starter No.20 E	The end of over run line i.e. upto derailing switch No.17 E
Entry line (line No.1)	-	-	Down starter No.31 E	Down advanced starter No.22 E
Uniflow Reception Line	Upto signal No.3E of nominated line.	Trailing Point		

6.3.1 RESPONSIBILITY OF STATION MASTER FOR RESTORATION OF SIGNALS TO 'ON':

If in an emergency a Reception signal is required to put back to On position, SM on duty shall observe SR 3.36.02(b) and GR 14.01

6.4 SIMULTANEOUS RECEPTION/DESPATCH, CROSSING AND PRECEDENCE OF TRAINS:

According to the existing inter locking at this station the simultaneous reception and dispatch is permitted.

Reception of an Up train on 1 st loop	&	a. Reception of a Down train on 2 nd loop
		OR
		b. Dispatch of another Up train from line No. 2 or 3 or 4
Reception of an Up train on 2 nd loop	&	Dispatch of another Up train from Line No. 2 or 1
Reception of a Down train on 2 nd loop	&	a. Reception of an Up train on 1 st loop line
		OR
		b. Dispatch of another Down train from 1 st loop or main line
		OR
		C . Reception of another train on Uniflow line
		OR
		Dispatch of another Down train from Entry Line

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6.5 COMPLETE ARRIVAL OF TRAINS:**FOR STOPPING TRAINS:**

- a. As soon as the train arrives, the facing end Cabin man will satisfy himself that the train has arrived complete and is standing clear of the fouling mark, will put back the reception signal lever to normal position. He shall report its intact arrival to the SS/S.M on duty supported by Private Number vide SR 3.38.01(f) for stopping trains.
- b. After normalizing the reception signal lever behind the incoming train, Cabin man shall assure the SS/S.M on duty that the signals have been put back to 'ON' supported by Private Number to comply GR 8.03(2)(b) and GR 14.10(2)(b).
- c. Putting back slot at trailing end, the trailing end Cabinman shall throw back the slot lever after ensuring that the train has arrived on the nominated berthing line or passed through.
- d. The S.S/S.M on duty shall normalize the SM's control slide as soon as the train enters into the station yard. After receiving assurance Private Number from the facing end Cabinman for intact arrival of the stopping train and/or signals put back, SS/S.M on duty shall send train out of block section signal to the station in rear.

FOR THROUGH TRAINS:

The SM on duty at station shall observe that the last vehicle of every train passing through his stations is provided with a last vehicle indicator board or tail lamp or such other device in accordance with the provisions of the GR 4.16 and SR thereto.

6.6 DISPATCH OF TRAINS:

- a) Dispatch of trains shall be governed by GR. 3.42 and SRs thereto. SR 3.36.04(b) and relevant provision of BWM 2.07 (5) shall be followed.
- b) Dispatch of trains from non signalled line is governed by GR 5.11.01
- c) **Issue of caution order:**
Whenever in consequence of the line being under repairs or for any other reasons special precautions are necessary a caution order detailing the kilometres and speed at which train should run with reasons for taking such precautions shall be handed over to the to the guard and loco pilot in terms of GR 4.09 and SR thereto.

6.7 TRAINS RUNNING THROUGH:

- a) The provision of GR 3.40, 4.17, 4.42 with relevant SRs and SR 3.42.02 (a)(iv) and other relevant provision of BWM shall be observed.
- b) The sequence for taking 'OFF' signals for run through trains is governed by SR 3.42.
- c) In every case in which trains are permitted to run through on a non isolated line, all shunting shall be stopped and no vehicle unattached to an engine or not properly secured in accordance with rule 5.23 may be kept standing on a connected line which is not isolated from through line vide SR 4.11(2).

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6.8 WORKING IN CASE OF FAILURE:**a) FAILURE OF TRACK CIRCUITS**

In the event of failure of track circuits, SM on duty shall ensure clearance of track circuited portion by sending TPM / TP to check before allowing movement of a train

b) FAILURE OF POINTS:

In the event of failure of points SM on duty shall observe GR 3.77 and relevant SRs

c) FAILURE OF SIGNALS

In the event of failure of approach stop signals GR 3.69 & relevant SRs shall be observed. In the event of failure of departure stop signals GR 3.70 & SRs thereto shall be followed.

d) FAILURE OF AXLE COUNTERS/AXLE COUNTER BLOCK:

Not applicable.

6.9 PROVISIONS FOR WORKING OF TROLRIES /MOTOR TROLRIES / MATERIAL TROLRIES:

- a) Motor trollies on 'Following line clear' are prohibited on sections BCHL-KRDL and BCHL-BHNS vide DSO/WAT's No.WTA/2 of 11-09-79.
- b) Material trolley working on Form 'B' is prohibited on sections BCHL-KRDL and BCHL-BHNS vide safety circular No.10/88 of 30-03-88.

7. BLOCKING OF LINE:

- a) Whenever a running line is blocked by a train or a vehicle the SM on duty shall enter a clear remark in RED ink immediately in the TSR indicating time and number of running line on which vehicles are stabled or blocked. A record there of should be made in the station dairy vide SR 5.25.01 (a)
- b) **Use of Slide Collars / Lever Collars:-**
Slide collars and lever collars must be placed on the concerned SM's slides and levers in cabin respectively controlling the blocked line Vide SR 3.36.03(b) and GR 5.04.01(a) points on other side of blocked line shall be set against as per the provisions of SR 3.51.06
- c) **Loading and Unloading of Vehicles on Running Lines:-**
Loading and Unloading of vehicles on running lines shall be governed vide SR 5.19.01.

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d) **Securing of Vehicles:**

The rules laid down in GR 5.23, SR 5.23.07 and OM 7.08 shall be followed.

e) **Detaching of Vehicles on Running Lines:**

Detaching of vehicles on running lines is normally prohibited. Whenever any vehicles is detached on running stock shall be placed opposite to the SM's office as far as possible and shall be properly secured vide SR 5.23.01.

8. SHUNTING:**8.1 GENERAL PRECAUTIONS :**

Shunting is governed by GR 3.46, 3.52 to 3.56, 5.13, 5.14, 5.16, 5.19, 5.20 to 5.23, 8.05(2)(3), 8.06, 8.10, 8.11, 8.13 & 8.15 with relevant SRs and operating manual 7.01, 7.07, 7.08 . Physical verification of the clearance of the cross over points shall be ensured by the cabin man on duty.

8.2 SHUNTING IN THE FACE OF AN APPROACHING TRAIN:

Shunting in the face of an approaching train is governed by GR 8.09. and relevant SRs thereto.

8.3 PROHIBITION OF SHUNTING - SPECIAL FEATURES:

- a) Shunting in the face of an approaching train is governed by SR 8.09.02(b)(i).
- b) Fly shunting is prohibited vide SR 5.21.01(c).
- c) Shunting at either end of the Station is governed by GR. 5.20- & SR there to.

8.4 SHUNTING ON SINGLE LINE:

- i) Within Station section: Shunting within the station section shall be governed by GR 8.10.
- ii) Between last stop signal and opposite first stop signal shall be governed by GR 8.12.
- iii) Beyond opposite first stop signal shall be governed GR 8.13.
- iv) During failure of block instrument: In the event of failure of Block instrument before allowing any shunt movement SM on duty at both the adjacent stations concerned shall exchange messages of Block back and ensure no other movement is allowed into that section until the shunting is completed or cancelled. Line block label is hung on the block instrument concerned. Whenever possible lock the block instrument in such a way to prevent the operation of block instrument.

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8.5 SHUNTING ON DOUBLE LINE:

Not Applicable

8.6 SHUNTING IN THE SIDING TAKING OFF FROM STATION YARD / GOODS SHED:

The shunting in the NMDC siding and temporary engineering siding shall be governed by SR 5.13.02. During Non signalled movement clamping and padlocking of facing and trailing points shall be resorted to. The relevant provision of GR 5.14 and SRs there to shall be meticulously followed.

9. ABNORMAL CONDITIONS:**a) RULES TO BE OBSERVED IN THE EVENT OF ABNORMAL CONDITIONS.**

- i) During partial interruption of communication between two adjacent block stations, SR 6.02.06. shall be observed.
- ii) In the event of occupation of block section due to accident or obstruction the authority for the train to work upto obstruction as and when required is T/A 602 & SR 6.02.05 shall be observed.
- iii) In the event of trains delayed in the block section GR 6.04 and relevant SRs shall be followed.
- iv) Failure/ passing of Intermediate block stop signal at ON position: Not applicable.
- v) Failure of Axle Counter Block/BPAC : Not applicable.
- vi) Failure of MTRC: Not applicable.

b) PROCEDURE FOR EMERGENCY OPERATION OF POINTS BY CRANK HANDLE:

The detailed procedure are described in para 20.2 of Appendix 'B' of this SWR.

c) CERTIFICATION OF CLEARANCE OF TRACK BEFORE CALLING ON SIGNAL OPERATION IS INITIATED:

Not Applicable

d) REPORTING FAILURE OF POINTS, TRACK CIRCUITS/AXLE COUNTERS AND INTERLOCKING.

- i) In the event of failure of points, signals, track circuits and interlocking the SM on duty shall advice the concerned Maintainer through a memo and after rectification shall obtain memo to his effect. SR 3.51.04 and SR 3.77.01 shall be followed.
- ii) The entries in the failure register to be done with message to the section controller.

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9.1 TOTAL FAILURE OF COMMUNICATIONS:

In the event of total failure of communications between two adjacent block stations SR 6.02.04 shall be followed.

9.2 TEMPORARY SINGLE LINE WORKING ON DOUBLE LINE SECTION:

Not Applicable.

9.3 DESPATCH OF TRAINS UNDER AUTHORITY TO PROCEED WITHOUT LINE CLEAR OR TO ASSIST THE CRIPPLED TRAINS:

- i) In the event of total failure of communications trains shall run on the authority to proceed without line clear in terms of SR 6.02.04.
- ii) In the event of necessity to send a train to assist the crippled train SR 6.02.05 shall be followed.

10. VISIBILITY TEST OBJECT:

- i) The lights of up starter signal No.20W of line No 1 and Dn. Starter signal No.19E of line No 1 are earmarked to serve as visibility test object during day and night vide GR 3.61,(2)(b)(iii).
- ii) The SM on duty may at his discretion comply GR 3.61(1) & arrange to place detonators as mentioned there in and when required to do so.

11. ESSENTIAL EQUIPMENT:

The detailed list of essential equipment to be kept readily available for use at the station is mentioned in Appendix-E of the SWR.

12. FOG SIGNAL MEN NOMINATED TO BE CALLED IN CASE OF FOG:

- i) During thick/foggy or tempestuous weather when the visibility of signals impaired the SM on duty shall comply GR 3.61 and relevant SRs thereto in order to indicate to the Loco Pilots of approach trains, the locality of a signal. Fog signalman shall be a regular employee of the Railway. Substitute/casual labour shall not be utilised as Fog Signalmen vide SR 3.61.01(i).
- ii) SM shall explain the rules to work in the event of fog to the Fog Signalmen nominated and their signatures to be obtained in Station Detonator Register on Form No. OP/T 124 vide SR 3.61.01(m).
- iii) Position of stock of detonators/use/testing etc. are maintained in terms of GR 3.64 and SRs thereto.
- v) A Register regarding detonator is maintained at the station which contains the following parts.

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Part-I : Particulars of fog signal men posted at the station from time to time.

Part-II: Particulars of receipt and stock of detonating (fog) signals at the station to be filled in whenever detonators are used or received.

Part-III: Periods of fogs, fog signalmen on duty and details of detonators used.

Part-IV: Particulars of issue and testing of fog signals at the station.

In charge of the station shall ensure that the information maintained in the register is kept up to date and is accurate in all respects.

Transportation inspectors shall check the registers and also the stock of detonators on hand each time they visit the station and initial with date as an indication having done so.

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13. APPENDICES:

Appendix 'A'	WORKING OF LEVEL CROSSING GATES.
Appendix 'B'	SYSTEM OF SIGNALLING AND INTERLOCKING AND COMMUNICATION ARRANGEMENTS AT THE STATION.
Appendix 'C'	ANTI COLLISION DEVICE (RAKSHA KAVACH).
Appendix 'D'	DUTIES OF TRAIN PASSING STAFF AND STAFF IN EACH SHIFT.
Appendix 'E'	LIST OF ESSENTIAL EQUIPMENT PROVIDED AT THE STATION.
Appendix 'F'	RULES FOR WORKING OF DK STATIONS, HALTS, IBH, IBS AND OUTLYING SIDINGS.
Appendix 'G'	RULES FOR WORKING OF TRAINS IN ELECTRIFIED SECTIONS.
Appendix 'H'	RULES FOR WORKING OF AUXILIARY YARD (BCHL RECEPTION CUM DISPATCH YARD)

CERTIFICATE

“NOTHING IN THESE RULES SHALL BE READ AS CANCELLING, AMENDING OR MODIFYING ANY GENERAL AND SUBSIDIARY RULES, BLOCK WORKING MANUAL AND OPERATING MANUAL. THESE RULES CANCEL ALL PREVIOUS STATION WORKING RULES”.

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APPENDIX 'A' TO STATION WORKING RULES OF BACHELI STATION

DETAILS OF LEVEL CROSSING GATES.

--NIL--

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APPENDIX 'B'

DETAILS OF SIGNALLING AND INTERLOCKING INSTALLATIONS, INSTRUCTIONS FOR WORKING THEM NORMALLY AND IN EMERGENCIES, INCLUDING THE POWER SUPPLY ARRANGEMENTS:

1. BRIEF DESCRIPTION OF THE SIGNALLING & INTERLOCKING INSTALLATIONS:

This is a 'B' Class station with Standard- I interlocking with installations. There are two end cabins for operating points and signals at either end of the BCHL Main yard and another cabin for operation of points and signals in reception yard and the station is equipped with Multi Aspect Colour Light Signaling with relevant SM's controls.

Saxby and Farmers D.W type lever machine with rack and pinion operation for rod worked points and locks along with the miniature lever for slots and keys along with miniature levers for slots and key controls are installed at East cabin (35 levers), West cabin (35 levers) and 'A' cabin of RYD with 42 levers. These levers shall operated points, point locks slots, key controls and signals etc.

2.0 POINTS AND LOCKS AND INTERLOCKING BETWEEN BLOCK INSTRUMENTS AND SIGNALS:

Facing points are fitted with plunger type locks with lock bars and electrically detected by the relevant signals. The home signals, advanced starter signals and relevant slide controls must be in the normal position while handling the block instrument of the section concerned. The advanced starter signals are controlled by the token less block instrument and home signals are also interlocked with the token less block instruments of respective section. Similarly the slip siding shall be in normal position before operating block instruments of the section concerned.

3.0 POINTS & SIGNAL INDICATORS IN THE CABINS:

Illuminated miniature indicators are provided for electrically operated slotted signals i.e. home and advanced starters in the cabin to show the Cabinman when the signals are to be taken off every signal also has got an indicator to show whether it is burning or not.

4.0 SLOT CONTROLS:

Each cabin is provided with slot levers to control the home signals operated by the other end cabin. The Cabinman at the trailing end can put back the home signals of facing end in case of emergency by normalizing the slot lever.

5.0 TELEPHONE COMMUNICATION:

Telephones are provided between the SS/S.M Office and both cabins.

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6.0 TRACK CIRCUITS:

- i) 33T inside Up home signal.
- ii) 22T point zone track circuit .
- iii) 27AT point zone track circuit .
- iv) 27BT point zone track circuit.
- v) UN1T2 & UN1T1 over the up reception Uni flow line.
- vi) 4T1 between signal no. S 4/5/6/7E and Fouling Mark of point No.27EA.
- vii) 3T replacement track circuit of signal No.3E.
- viii) 4T inside Up inner Home S4/5/6/7E
- ix) 29 AT on point zone of motor point 29A.
- x) 29 BT on point zone of motor point 29B.
- xi) 18T1, 18T2 between Down home signal and Up last stop signal.
- xii) 18T Down home signal.

One slot one train system is introduced at this station.

7.0 SIDING CONTROL:

The details are shown in main SWR.

8.0 DESCRIPTION OF LEVERS IN CABIN:

There are 35 levers in **East cabin** (S&F D.W. Type) and their individual function is detailed below:

LEVER NO.	FUNCTION
1	Spare
2	Spare
3	Up reception signal No.3E on uniflow line.
4	Up main home signal
5	Up 1 st loop home signal
6	Up 2 nd loop home signal
7	Home signal for Bachel terminal yard
8	Slip siding point (motor operated)
9	Holding bar on main running line
10	Lock bars point No.11 & 14 at East side
11	Crossover point between main line and 2 nd loop
12	Lock bar on point No.11 West end
13	Holding bar on main line
14	Crossover point between main and 1 st loop line
15	Lock bar on derailing switch for 1 st loop line
16	NMDC siding control key
17	Derailing switch with a trap indicator isolating overrun line with the shunting neck
18	Intermediate Dn. starter
19	Down 1 st loop starter

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20	Down 2 st loop starter
21	Down main starter
22	Down Advanced Starter
23	Slot for Down 1 st loop home signal
24	Slot for Down 2 nd loop home signal
25	Slot for Down main home signal
26	Engineering siding control key
27	Cross over point between main line and uniflow line.
28	Key 'M'
29	Crossover point between through line entry line for terminal yard motor (operated)
30	Spare
31	Down starter of entry line
32	Slot for entry line for 'A' cabin at terminal yard
33	Up Home signal for reception in BCHL yard
34	Up Home signal for Uniflow line
35	Releases lever no 34E
36	Releases lever nos. 22E, 33E and 34E.

9.0.2 **LEVER PULL CHART OF EAST CABIN:**

TO RECEIVE UP TRAINS ON	LEVERS TO BE PULLED
Line No.1	14, 15, 10, 8, 5,33E
Line No.2	10, 8, 4, 33E
Line No.3	11, 8, 10, 12, 6, 33E
Entry Line	8, 29, 7

TO DESPATCH DOWN TRAINS FROM	LEVERS TO BE PULLED
Line No.1	8, 14, 13, 15, 18, 19, 9, 22E
Line No.2	8, 13, 18, 21, 9, 22E
Line No.3	8, 11, 12, 18, 20, 9, 22E
Entry Line	8, 29, 18, 31

TO RECEIVE DOWN TRAINS ON	LEVERS TO BE PULLED
Line No.1	14, 15, 23, 13, 9
Line No.2	13, 25, 9
Line No.3	12, 24 (OR) 11, 12, 24
Entry Line (To receive Down train)	32

9.1 There are 35 levers in the West cabin (S&F) D.W. Type and their individual function is detailed below:

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LEVER NO.	FUNCTION
1	Spare
2	Spare
3	Spare
4	Down main home signal
5	Down 2 st loop home signal
6	Down 1 st loop home signal
7	Holding bar on main running line
8	Spare
9	Spare
10	Lock bars point No.11 & 13 at West side
11	Crossover point between main line and 2 nd loop
12	Lock bar on point No.11 (East end)
13	Crossover point between main line and 1 st loop line
14	Lock bar for point No.13 East end
15	Spare
16	NMDC siding control key
17	Spare
18	Up advanced starter
19	Up 2 nd loop starter
20	Up 1 st loop starter
21	Up main starter
22	Spare
23	Slot for Up 2 nd loop home signal
24	Slot for Up 1 st loop home signal
25	Slot for Up main home signal
26	Spare
27	Spare
28	Spare
29	Spare
30	Spare
31	Spare
32	Spare
33	Spare
34	Spare
35	Spare

9.2 **LEVER PULL CHART OF WEST CABIN:**

TO RECEIVE DOWN TRAINS ON	LEVERS TO BE PULLED
Line No.1	13, 14, 7, 6, 10
Line No.2	10, 7, 4

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Line No.3	11, 12, 10, 7, 5
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TO DESPATCH UP TRAINS FROM	LEVERS TO BE PULLED
Line No.1	13, 14, 18, 20
Line No.2	18, 21
Line No.3	11, 12, 18, 19

TO RECEIVE DOWN TRAINS ON	LEVERS TO BE PULLED
Line No.1	14, 24 (OR) 13, 14, 24
Line No.2	25
Line No.3	12, 23 (OR) 11, 12, 23

10.0 **SM's CONTROL SLIDES:**

There are 12 slides in the SM's slide control machine and the individual function of each slide is detailed below:

SLID E NO.	FUNCTION
1	Up advanced starter
2	Up Reception for Uniflow line
3	Down main home
4	Down 2 nd loop home
5	Down 1 st loop home
6	Up home for entry line
7	Despatch signal No.33 of 'A' cabin
8	Up home for 2 nd loop
9	Up home for 1 st loop
10	Up home for main line
11	Spare
12	Down advanced starter

11.0 **USE OF COLLARS AND SLIDE COLLARS:**

Lever collars and slide collars are to be placed on the respective levers and slides as shown in the tabular form whenever running lines are otherwise blocked vide SR 5.04.01 and SR 3.36.03.

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LINE NO.	LEVER COLLARS ARE TO BE PLACED ON LEVER SLIDE						COLLARS BE PLACED ON SM's SLIDE
	EAST CABIN			WEST CABIN			
	HOME SIGNAL	POINT LEVER	SLOT LEVER	HOME SIGNAL	POINT LEVER	SLOT LEVER	
1 st loop	5	14N	23	6	13N	24	5 & 9
Main line	4	-	25	4	-	25	3 & 10
2 nd loop	6	11N	24	5	11N	23	4 & 8

11.1 The above chart shall be exhibited in both the cabins and SM's office vide OM 20.04(7).

12.1 **MAINTENANCE OF S&T INSTALLATION AND ADHERENCE TO MAINTENANCE SCHEDULES:**

The regular maintenance of the S&T installation and adherence to the schedules of maintenance as also to the mandatory schedules of testing of point, signals, lever machines, level crossing gates, the associated interlocking apparatus, i.e. cables and finally interlocking function tests is a must for the safe and satisfactory working of the installations at this station.

12.2 The tests, checks and replacements etc., including overhauling shall confirm to the schedules of maintenance as indicated in the Signal Engineering Manual as also in the current and extant instructions/circulars on the subject.

13.1 **PROCEDURE TO BE FOLLOWED IN CASE OF FAILURE OF SIGNAL AND INTERLOCKING INSTALLATION:**

13.2 **INSPECTION OF POINTS BEFORE DECLARING THEM DEFECTIVE:**

However, before declaring a signal as defective, the setting of the point on the route to which it applied, shall be inspected by the SS/S.M/Cabinman irrespective of the position of the point levers and signal levers in terms of SR 3.51.02.

13.3 **RECTIFICATION AND CHECK BEFORE RESUMING NORMAL WORKING:**

After receipt of this information the Sectional Maintainer (Electrical or Mechanical) shall attend to the failure after giving disconnection memo if required to be given. After rectification of the fault, the Sectional Maintainer shall give a reconnection memo detailing the rectification. Thereafter the SS/S.M on duty has personally checked this defective gear and after satisfying himself that it is good and proper working order, he shall resume the normal working of the said defective gear in terms of SR 3.68.04.

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14.0 **PROCEDURE FOR CARRYING OUT PLANNED MAINTENANCE WORK:**

Whenever any normal maintenance or special works for renewal etc., are involved these works should be carried out by the Signal & Telecom. field staff and the JE(s) of the section should give to the SS/S.M in writing advanced intimation about this planned work in terms of 15.08.01.

15.0 **EMERGENCIES:**

Notwithstanding anything contained in the aforesaid para Nos.13.1, 13.2 and 14.0 when a gear found to be defective and unsafe for passage of trains Signal and Telecom. staff must at once suspend the working of that gear and the associated installations and issue suspension memo explaining the seriousness of the defective/damage to the interlocking installation to the SS/S.M and the acknowledgement is to be obtained. After this the usual practice of exchange of disconnection and reconnection memo shall follow. The SS/S.M must promptly act on such messages and take adequate precautions treating the S&T installation as defective and pass trains over the affected interlocking gears according to extant instructions as contained in GR 3.77.

16.0 **CORRECTING TIME IN STATION CLOCK:**

The SS/S.M shall set the time on his clock according to the time signal given by the Section Controller on duty at 16:00 hrs. everyday according to SR 4.01.01 and 4.01.02.

17.0 **BASEMENT/RELAY ROOM KEY:**

The SS/S.M shall handover the cabin basement/relay room key whenever required, to ESM/MSM/JE under clear signature as and when required for their normal maintenance and special works. The key should be returned by the S&T staff immediately after completion of their work and document all such transactions in the basement/relay room key register maintained at station according to SR 3.51.05.

18.0 **NORMAL POWER SUPPLY:**

Normal power supply to the signaling and interlocking installations at this station is drawn from the traction power supply source through auxiliary transformer (at 230V – 50 Hz).

18.1 **STAND BY POWER SUPPLY:**

The stand by power supply is from local power supply source (230V – 50 Hz).

18.2 **MAINTENANCE OF POWER SUPPLY:**

Whenever traction power supply fails the SS/S.M on duty shall operate the CHANGE OVER SWITCH provided in the Station Master office, connecting the power supply from the healthy source to the installation.

19.0 **POWER FAILURES AND REPORTING SUCH FAILURES:**

The SS/S.M on duty must however, maintain the record of power failure and must promptly report the failure immediately to the controller and to the concerned Electrical and S&T maintenance staff.

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20.0 SPECIAL PROVISION FOR WORKING OF MOTOR POINTS:

20.1 Point Nos.8, 29A, 29 B,27A and 27B of East cabin are motor operated. In case of failures of any of the points either due to electrical failure or due to failure of concerned track circuits or due to some other defects, the points shall be operated by emergency crank handle. One interlocked emergency crank handle is kept in the East cabin for the operation of the motor points. This crank handle is riveted to the HKT key and the same is electrically locked in the HKT. A push button for operating the HKT is provided at East cabin. The interlocked emergency crank handle can be extracted only when all the Down starter signals and Up reception signals are in their ON positions. These signals cannot be taken off when the crank handle is out from the HKT. After setting the required points with the crank handle the points should be clamped and padlocked at both facing and trailing ends for reception and dispatch of trains and performing shunting operations over these points.

20.2 EMERGENCY OPERATIONS:

Electrical lever locks are fitted on lever Nos.8, 29 and 27 of East cabin for holding the routes. Electrical lever lock on lever Nos.8, 29 and 27 are controlled by track circuits 8T, 29AT, 29BT, 27AT and 27BT when a train/engine non-insulated trolley/diplory motor trolley is standing or passing over the above track circuit it will not be possible to operate the respective levers in East cabin.

In case of failure of track circuits 8T/29AT the slip siding point lever No.8E will be held in the last operated position normal or reverse, as the case may be. Similarly in case of failure of track circuits 8T/29AT/29BT point lever No.29E will be held in the last operated position and. in case of failure of track circuits 27AT/27BT point lever No.27E will be held in the last operated position. In order to release these levers an emergency time release is provided in the SM's office. It is provided with a handle, which is normally sealed. In case of failure of track circuit 8T, 29AT, 29BT, 27AT and 27BT the East cabin LMA will advise the SS/S.M on duty who will take the following action to release the concerned lever.

After ensuring from East cabin LMA that the track is clear of vehicles the SM will cut the seal and rotate the handle clock wise till the 'R' position of the 'Emergency' release coincides with the arrow mark. The Station Master on duty will advise the East cabin LMA to put back the levers which were held locked. The LMA on seeing the 'OFF' position of the indicator (provided in the East cabin) will press an 'Emergency Push Button' (provided in the East cabin) and will operate the concerned lever. On being assured by the LMA that the relevant lever/levers is/are operated to the required position. The Station Master on duty will reset the 'Emergency Release' to normal by rotating the handle clock wise direction till the 'N' position coincides with the arrow mark. The concerned ESM should be immediately advised to attend the failure. The failure should be recorded in the Station Master's diary as well as in the signal failure register. After the fault is rectified, the ESM will reseal the handle of the 'Emergency Release' and restore normal working.

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20.3 SLIP SIDING OPERATION:

When a Down train is dispatched and clears track circuit 8T and 4T an alarm bell will ring in East Cabin to intimate that the track circuit 4T and 8T is clear of vehicles. The LMA shall restore point No.8 to normal position only on receipt of bell warning. The alarm bell will also ring in case of reception of an Up train when the track circuit 8T is occupied and then cleared by the incoming train and then restore all levers to normal.

In case of failure of alarm bell, the LMAs of East cabin should satisfy that no vehicles is standing over point No.8 and track circuit 8T as well as 22T & 27AT , before normalizing the lever No.8.

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APPENDIX 'C' TO STATION WORKING RULES OF BACHELI STATION

ANTI COLLISION DEVICE (RAKSHA KAVACH)

NIL

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APPENDIX 'D'

The following staff are concerned with the movement of trains whose duties are given below:

1. STATION MANAGER:

The SMR is the Supervisor of the station having supervisory duties and is responsible for the general satisfactory working of the station and the efficient discharge of the duties by all the staff under him. His special attention is drawn to rule Chapter-II. He is responsible for ensuring that:

- a. The staff employed under him carryout their respective duties as prescribed to them and report irregularities to the Competent Authority.
- b. The staff are civil and helpful to all users of the Railway.
- c. All accidents are promptly reported, attended to and comprehensive report with details i.e., sketches, statements of staff involved, fixing responsibility is sent within 48 hours of the occurrence to the DRM through the Sectional DTI.
- d. All rules prescribed in General and Subsidiary Rules, train signalling rules, Operating Manual and other directives issued from time to time by Competent Authorities are followed by all concerned and that any irregularities in respect thereof reported.
- e. All transportation records which are maintained in the station and cabin are checked daily and taken measures to correct the irregularities.
- f. The BWM 2.09(c) complied with daily.
- g. The proper utilisation of wagons, placed in goods shed registration of indents and supply of wagons as per allotment is done.
- h. All equipment, apparatus, instruments including signal and interlocking gears and fittings are kept clean and all failures thereof are promptly reported to officers concerned for repairs notice and action.
- i. All station earnings, periodical returns and statements etc. are sent in time by the staff responsible for them.
- j. Station premises are kept clean and tidy.

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NOTE:

In case of emergency he must be prepared to take up line clear duties.

2. STATION SUPERINTENDENT/Dv. STATION SUPERINTENDENT:

He is responsible for train passing during his shift. He shall immediately bring to the notice of SS all irregularities and accidents in course of his shift duties. During the absence of SMR the duties of the SMR will devolve on him. He shall follow GR 3.45, SR 3.68.01(c)&(d), SR 14.07.01. His special attention is drawn to Chapter II of G&SR 1976 and GR 5.01 to 5.08 with relevant SRs. As an assistant to SS he shall carry out the instructions given to him by the SS.

3. YARD MASTER/YARD FOREMAN:

He is responsible for allocating clear line for reception of trains in the terminal yard and sign in the line nomination book. He shall suspend all shunting on the lines not isolated from the line nominated for reception or despatch of trains and withdraw shunting authority from the loco pilot and then only sign in the line nomination book. He is responsible for supervising placing of empty rake in loading yard, attaching the brake van in rear of the rake, securing the rake, detaching of sick wagons, drawing out loaded rakes from loading yard to reception-cum-despatch yard after receiving fit memo from TXR and attaching of train power on outgoing rake. He is responsible for detention of powers and internal movements in his yard. He shall keep close contact with the SS/S.M on duty at BCHL station for admission and despatch of trains of terminal yard. He shall maintain a diary, shunting engine log book etc., showing detention to trains and power utilisation. He is also responsible for any other work as defined in the rule books and circulars issued from time to time by competent authority. He shall carryout any work entrusted by SMR/SS/S.M of BCHL within the rules prescribed for safe operation.

Yard Master shall plan the proper work and record them in night order book for the guidance of the yard foreman.

4. CABIN LEVERMAN:

He shall operate the levers of the points locks and signals in whichever the cabin he is posted for the time being in proper sequence. He is responsible for keeping the lever frame and the cabin clean and tidy and shall not allow any unauthorised person into the cabin vide GR 5.04(3). He will clean and polish the lever handles. He shall report defects and deficiencies if any immediately to the SS/S.M on duty.

He shall see that no unauthorised person is allowed to interfere with the levers and other apparatus. He shall place lever collars on the concerned levers whenever running lines are blocked irrespective of period of block vide SR 5.04.01(a). When overhead line staff are working on the electrified portion of the line for any reason, the levers controlling the line under repairs shall be protected in signal cabins by

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means of lever collars vide SR 5.04.01(b). He shall not leave the cabin while on duty until he is relieved by a competent person vide SR 3.51.01.

He shall set, clamp and padlock the concerned points during the course of piloting IN and OUT of trains. He shall carryout other work entrusted to him by SS/S.M on duty. He will watch the run through trains specially and report irregularities immediately to S/S.M on duty vide SR 4.42.02.

5. TRAFFIC POINTSMEN/TOKEN PORTER:

He shall work under the orders of the SS/S.M on duty. He shall couple and uncouple vehicles under the supervision of SS/S.M/Guard/YM/TYS. He shall deliver line clear authority to the Loco Pilots of the trains.

He shall watch and guard the packages and other Railway property lying in the station premises. He shall be through with the correct usage of displaying hand signals. He shall report any irregularities coming to his notice. He shall do loading and unloading of parcels and smalls. He shall do piloting IN and OUT. He shall deliver any official message to the proper person/office.

He shall carryout any other duties entrusted to him by SS/S.M on duty.

6. SAFAIWALA-CUM-PORTERS:

He shall deliver any official message to the proper person/office. He shall serve call book to Loco Pilots and guard. He shall load and unload the line boxes of guards and Loco Pilots.

He shall attend to the sanitation of the Railway premises including SM's office, platform, latrines and cleaning of drainages etc. He shall clean and fill with K-oil in the hand signal lamps, if available. He shall carryout any work entrusted to him by the SS/S.M on duty.

N.B:

All staff while on duty should be in proper uniform.

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APPENDIX 'E'**ESSENTIAL EQUIPMENT:**

List of essential equipment is given below which shall be maintained in good working order vide OM 20.04(11):

SL. NO.	EQUIPMENT	STATION	EAST CABIN	WEST CABIN	A CABIN
1	Detonators	20	-	-	-
2	Hand Signal Lamps	6 (2 spare)	1	1	1
3	Hand Signal Flags	2 sets (2 spare)	1 set	1 set	1 set
4	Clamps with pad locks	6	2	2	2
5	Safety Chains with padlocks	6	-	-	-
6	Sand and Fire buckets	5	-	-	-
7	Lever collars	-	6	6	6
8	Slide collars	8	-	-	-
9	First Aid Box	1	-	-	-
10	Stretcher	1	-	-	-
11	Blanket	1	-	-	-
12	Fire Extinguishers	2	-	-	-
13	Slot collars	-	3	3	3
14	Lever collars for power block	-	6	6	6
15	Slide collars for power block	6	-	-	-
16	Iron Skids	2	2	2	2

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APPENDIX 'F' TO STATION WORKING RULES OF BACHELI STATION

**RULES FOR WORKING OF DK STATIONS HALTS, IBH, IBS
AND OUTLYING SIDINGS**

There is no provision at the station.

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APPENDIX 'G' TO STATION WORKING RULES OF BACHELI STATION

Details of the working for 25 KV AC Traction of "BACHELI" station is enclosed as annexure.

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APPENDIX 'H'**SWR OF AUXILIARY YARD (BCHL RECEPTION-CUM-DESPATCH YARD):****1.1 LOCATION AND DESCRIPTION OF THE SIGNALLING AND INTERLOCKING INSTALLATIONS:**

Auxiliary yard at BCHL is terminal yard takes off from East end of the BCHL station yard and is situated at KM 436.455 (as reckoned from KTV). This yard consists of a reception-cum-despatch yard (with 5 lines) and loading yard is divided into 3 separate grids as lump yard, fine yard and 10A & 11A deposit loading yard. Each of the loading yard is having 3 lines (one amongst is engine run round line) each. All the lines at the other end are terminated into dead end. The points and signals at the entrance end of reception-cum-despatch yard is operated by 'A' cabin and is equipped with manually operated Multi Aspect Colour Light Signalling. All other points are hand operated points. Inter slotting arrangement is provide between 'A' cabin and BCHL East cabin.

1.2 STATION WORKING RULE DIAGRAM:

The signalling and interlocking installations of this yard conforms the interlocking plan No. SI-23035-ALT 'B' and based on this interlocking plan the station working rule diagram with number . SI-23035-ALT 'B' is issued for this yard and this drawing shows the position of the points, number of lines, signals, stop boards together with additional information like gradients, speed restrictions, ground frame, communication with cabin etc. Additionally the capacities with available lengths of lines are also indicated in the SWR diagram.

1.3 LAYOUT:

The yard consists of 5 reception/despatch lines of standard length and terminates into Engine Reverse Line at Ch. 338.3 M.

1.3.1 RUNNING LINES WITH CAPACITY:

Line No.	CSL in Meters (SH to SB)	Electrified/Non Electrified
1	848	Electrified
2	771	-do-
3	726.6	-do-
4	653	-do-
5	719	-do-

Three full length iron ore loading grids of 3 lines each are provided for lump ore loading, fine ore loading and 10A & 11A deposit loading lines (where both fine & lumps are loaded) separately. All the loading yards are connected to reception yard giving accessibility to all the four lines of Reception cum despatch yard.

A stop board is provided on the line leading to the loading yard.

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Entry Line : Line -1		1318 M	Electrified
Loading line		CSL in Meters	
Lump	Line No 2	750	Top Wiring
	Line No 3	750	-do-
	Line No 4	750	Electrified
Fine	Line No 5	750	-do-
	Line No 6	750	Top wiring
	Line No 7	750	-do-
Deposit	Line No 8	746	Electrified
	Line No 9	746	Top wiring
	Line No 10	746	-do-

1.4

PICTURE DIAGRAM:

The painted picture diagram is also fixed at 'A' cabin and this picture diagram conforms to yard working rule diagram.

2.0

SIGNALLING AND INTERLOCKING:

2.1

SIGNIFICANCE OF SIGNALS:

The significance of the various combinations of the Multi Aspect Colour Light Signalling lies in accordance with GR 3.08(4)(b) and 3.14.9.

2.2

OPERATION OF SIGNALS AND POINT ETC.:

The 'A' cabin is manned by LMA/TPM.

2.3

IRS DIRECT TYPE lever machine is installed with 49 levers at 'A' cabin to operate points, point locks, signals etc. and their individual function is detailed below.

LEVER NO.	FUNCTION
1	Slot for reception from BCHL East cabin
2	Spare
3	Spare
4	RYD Home for line No.2
5	RYD Home for line No.1
6	RYD Home for line No.3
7	RYD Home for line No.4
8	Spare
9	Spare
10	Spare
11	Shunt signal from 10A & 11A deposit loading yards to RYD
12	Shunt signal from lump and fine yard to RYD
13	Spare
14	Spare
15	Spare

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LEVER NO.	FUNCTION
16	Lock bar on crossover point No.18 at East end
17	Point to loading yard
18	Crossover point between entry line and RYD line No.1
19	Double lock bar on point No.18 at West end and 17 at East end
20	Holding bar on loading yard
21	Crossover point between RYD line No.1 & 2
22	Lock bar on crossover point No.21 at West end
23	Lock bar on crossover point No.24 at East end
24	Crossover point between RYD line No.2 & 3
25	Lock bar on crossover point No.24 at West end
26	Point between line No.3 & 4
27	Lock bar on point No.26 at East end
28	Control key 'P' for siding
29	Spare
30	Shunt signal from line No.2 to lump and fine yard
31	Shunt signal from line No.1 to 10A & 11A deposit loading yard
32	Shunt signal from line No.1 to lump and fine yard
33	Shunt signal on line No.2
34	Shunt signal on line No.3
35	Shunt signal on line No.4
36	Spare
37	Shunt signal from line No.2 to 10A & 11A deposit loading yard
38	Starter on line No.2
39	Starter on line No.1
40	Spare
41	Spare
42	Spare

2.3.1 PULL CHART OF 'A' CABIN:

TO RECEIVE TRAIN FROM BCHL EAST CABIN:

Line No.	Levers to be pulled
Line No.1	18, 19, 16, 5
Line No.2	4
Line No.3	23, 24, 25, 26, 6
Line No.4	23, 24, 25, 7

TO DESPATCH TRAIN FROM 'A' CABIN TO BCHL EAST CABIN:

Line No.	Levers to be pulled
Line No.1	19, 18, 16, 39
Line No.2	33, 38
Line No.3	23, 24, 25, 38, 26, 27, 34
Line No.4	23, 24, 25, 38, 35

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2.4 SHUNTING MOVEMENT TO:

Line No.	10/11A deposit loading yard	Lump and fine yard grids
Line No.1	19, 17, 31	32
Line No.2		20, 21, 22, 30, 33
Line No.3		20, 21, 22, 23, 24, 25, 26, 27, 30, 34
Line No.4	35 only for B.V. siding	

SHUNTING MOVEMENT FROM LUMP AND FINE YARD GRID TO:

Line No.	Levers to be pulled
Line No.1	12
Line No.2	22, 21, 20, 12
Line No.3	26, 27, 25, 24, 23, 22, 21, 20, 12
Line No.4	25, 24, 23, 22, 21, 20, 12

SHUNTING MOVEMENT 10A & 11A DEPOSIT LOADING YARD TO:

Line No.	Levers to be pulled
Line No.1	19, 17, 11
Line No.2	17, 19, 20, 21, 22, 11
Line No.3	26, 27, 25, 24, 23, 22, 21, 20, 19, 17, 11
Line No.4	25, 24, 23, 22, 21, 20, 19, 17, 11

3.0 LEVER COLLARS:

Lever collars are to be placed on the respective levers as shown in the tabular form whenever lines are blocked vide SR 5.04.01 and 3.36.03(b).

LINE NO.	LEVER COLLARS ARE TO BE PLACED ON LEVERS AT 'A' CABIN	
	POINT LEVERS	HOME SIGNAL LEVERS
Line No.1	18 N	5
Line No.2	18 R	4
Line No.3	26 N	6
Line No.4	26 R	7

4.0 MEANS OF COMMUNICATION:

- (i) Telephone communication is provided between 'A' cabin and SS/S.M-BCHL.
- (ii) The 'A' cabin is connected to KRPU-KRDL control circuit.

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5.0 WORKING OF TRAINS:

The movement of trains shall be regulated by the Section Controller on duty whose orders must be carried out provided they do not contravene any G&SR, OM, BWM and any other safe working principles. In the event of control being suspended the SS/S.M on duty of BCHL station shall work independently.

The YM/AYM on duty is responsible for the internal movement in the yard. The reception of trains into the yard and the engine movements are controlled by the YM/AYM on duty.

6.0 RECEPTION OF TRAINS FROM BCHL STATION TO RECEPTION – CUM-DESPATCH YARD.

The reception of trains is governed by G&SR,3.36, 3.38, 3.40 and 8.03(2)

6.1 Movement of trains from BCHL station to reception-cum-despatch yard.

Section Controller on duty will inform the SS/S.M on duty at BCHL, about the nomination of train for BCHL for offering for loading with the expected time of arrival. On getting the advise from the SS/S.M on duty at BCHL regarding the reception of a train the Cabin man on duty at 'A' cabin will inform to the YM/AYM on duty for the nomination of a clear line.

The YM/AYM shall nominate a clear line after assuring that,

- i) The line nominated is clear and free from all obstructions.
- ii) All shunting operations infringing the line nominated for reception of a train at his end of the yard are suspended. He shall repeat the nominated line to the cabin man of 'A' Cabin under the exchange of private number. After getting assurance from YM/AYM on duty, the cabin man shall ensure that, all the points for the nominated route are correctly set and locked. He shall inform it to SS/S.M on duty supported by Private number.
- iii) The cabin man of A cabin shall pull slot lever no. 1. After getting the assurance, SS/S.M on duty will authorise the Cabin man at East Cabin to take off the concerned home signal for reception of the train by pulling concerned SM's slide supported by a Private Number. After the complete arrival and berthing of the train within the fouling mark, the Cabin man of 'A' cabin will advise the SS/S.M on duty about the complete arrival of the train, supported by a Private Number in accordance with SR. 4.17.01.

To receive a train in RYD on Line no. 5, GR 5.10 shall be followed.

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6.01.4 MOVEMENT OF TRAINS THROUGH UNIFLOW RECEPTION LINE TO RECEPTION-CUM-DESPATCH YARD:-

- (a) The Section Controller on duty will inform SS/S.M on duty at BCHL about nomination of train for BCHL for loading with the expected time of arrival. On getting the advice SS/S.M on duty BCHL should inform regarding the reception of a train on Uni-flow reception line, to YM/AYM on duty at RYD for the nomination of a clear line.
- (b) The YM/AYM will repeat the nominated line i.e., any one of NMDC line No 2 to 10, shall ensure that,
- (i) The line nominated is clear from all obstructions.
 - (ii) All shunting operations infringing, the line nominated for reception of the train at his end of the yard are suspended.
 - (iii) All hand points are correctly set and locked in favour of the train.
- (c) The YM/AYM will repeat the nominated line to SS/S.M on duty under exchange of Private Number. At the same time SS/S.M shall also advise the cabin man of East Cabin to set and lock the points in favour of incoming train.
- (d) **WORKING OF KEY OPERATED POINT M1, M2 & M3**
1. Key 'M' is kept with lever No.28 in normal position.
 2. Key 'M' to be obtained after lever No.28 reversed.
 3. Key 'M' is transmitted to goomty through RKT and inserted in 'E' type lock at site to reverse point M1,M2 and M3
- (e) **TO TAKE 'OFF' SIGNAL No.3**
- (i) The YM/AYM will repeat the nominated line i.e., any one of NMDC line shall ensure that,
 - (ii) The line nominated is clear from all obstructions.
 - (iii) All shunting operations infringing, the line nominated for reception of the train at his end of the yard are suspended.
 - (iv) All hand points are correctly set and locked in favour of the train.
 - (v) The YM/AYM will repeat the nominated line to SS/S.M on duty under exchange of Private Number. At the same time SS/S.M shall also advise the cabin man of East Cabin to set and lock the points in favour of incoming train and take 'off' signal No.3.

7.0 MOVEMENT OF TRAINS FROM RECEPTION-CUM-DESPATCH YARD TO LOADING YARD:

On getting the advice from the YM/AYM when the train is ready to despatch to the loading yard and Cabinman shall correctly set and lock the required points for the despatch of trains to loading yard, suspending all the shunt movements from the lines not isolated and then he shall take off the shunt signal of the concerned line. The signalled movement towards loading yard is only upto STOP BOARD. Beyond the stop board the movements shall be controlled by hand signals by the yard staff. Before taking OFF shunt signals, the Cabinman shall take assurance of yard staff to the effect of clamping and padlocking of the hand points in favour of the train to be placed in the loading yard supported by a Private Number.

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The train will be backed under the personal supervision of YM/AYM into the loading yard and berthed properly and ensure securing of the rake on the loading line.

NOTE:

While giving placement the Match truck will be detached in the adjacent grid on the top of the line, clearing the fouling mark. The rake further pushed into the intended line. After placement of the rake in the loading line, the Match truck will be attached on train thereby the Match truck automatically reversed as rear most vehicle to the outgoing direction.

8.0 MOVEMENT OF TRAINS FROM LOADING YARD TO RECEPTION-CUM-DESPATCH YARD:

The YM/AYM shall ensure correct setting of hand operated points for the train to be received from the loading yard and clamp and padlock the non-interlocked facing points.

After getting ready with the loaded rake the YM/AYM will contact the 'A' cabin and advise him for the reception of the loaded rake. The 'A' cabin Cabinman will set and lock the points of the nominated clear line and take off the concerned shunt signals. The loaded rake will be drawn into the reception-cum-despatch yard and the powers will be reversed and attached on to the train at KTV end of the yard.

- 8.1** The iron ore loading siding at RYD/BCHL consists of three grids with 3 lines each for lump ore loading, fine ore loading and 10A & 11A deposit loading lines where both lump and fines are loaded. Line No.1 & 2 in the grids are used for mechanical loading and Line No.3 for detaching sick etc. All the lines are provided with OHE.

The hand operated facing points leading to loading grids are to be clamped by yard staff before allowing any movement. YM/AYM on duty shall personally supervise the placement and drawn out of rakes.

9.0 MOVEMENT OF TRAINS FROM RECEPTION-CUM-DESPATCH YARD TO ENTRY LINE:

As soon as the outgoing train is ready in all respects the YM/AYM shall inform to SS on duty as well as Section Controller.

On getting orders from Section Controller to start the train the SS/BCHL on duty will advise the Cabinman at 'A' cabin to set and lock the points for the despatch of trains.

The Cabinman will ensure that

- (i) all shunting operations at departure end are suspended
- (ii) the concerned shunting authority issued for the shunting on the lines not isolated from the line nominated for despatch are with drawn and kept under his custody
- (iii) points for the out going train are correctly set and locked. Then he will assure the SS/S.M of BCHL the same information supported by a Private Number.

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The SS/BCHL on duty after ensuring that the entry line is free from obstruction and shall permit to admit the train from RYD onto the entry line. He shall inform the Cabin man of East Cabin regarding the description of train and advise to give slot for Entry line under exchange of Private Number. Then SS/BCHL shall give slot to 'A' cabin and advise Cabin man to start the train. On getting slot indication, the Cabin man of 'A' cabin shall take off the concerned Shunt/Starter signal as well as common Starter signal. The taking off concerned Shunt/Starter signal as well as common Starter signal shall be the authority to the Loco Pilot of the train to start his train from reception/dispatch yard"

The SS/BCHL on duty after obtaining Line clear from BHNS under the system of working shall advise East Cabin man to set the out going route for the departure of the train from entry line to BHNS supported by Private Number. Taking off last stop signal from entry line will be the authority to proceed for Loco Pilot to enter in to the block section under the system of working.

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APPENDIX 'H'**SWR OF AUXILIARY YARD (BCHL RECEPTION-CUM-DESPATCH YARD):****1.1 LOCATION AND DESCRIPTION OF THE SIGNALLING AND INTERLOCKING INSTALLATIONS:**

Auxiliary yard at BCHL is terminal yard takes off from East end of the BCHL station yard and is situated at KM 436.455 (as reckoned from KTV). This yard consists of a reception-cum-despatch yard (with 5 lines) and loading yard is divided into 3 separate grids as lump yard, fine yard and 10A & 11A deposit loading yard. Each of the loading yard is having 3 lines (one amongst is engine run round line) each. The points and signals at the entrance end of reception-cum-despatch yard is operated by 'A' cabin and is equipped with manually operated Multi Aspect Colour Light Signalling. All other points are hand operated points. Inter slotting arrangement is provide between 'A' cabin and BCHL East cabin.

1.2 STATION WORKING RULE DIAGRAM:

- i) Station Working Rule Diagram No.SI 23035 ALT 'B'.
- ii) CSTE/E.Co. Rly/DRG No. SI 23035 ALT 'B'.

1.3 LAYOUT:

The yard consists of 5 reception/despatch lines of standard length and terminates into Engine Reverse Line at Ch. 338.3 M.

1.3.1 RUNNING LINES WITH CAPACITY:

Line No.	CSL in Meters (SH to SB)	Electrified/Non Electrified
1	848	Electrified
2	771	-do-
3	726.6	-do-
4	653	-do-
5	719	-do-

Three full length iron ore loading grids of 3 lines each are provided for lump ore loading, fine ore loading and 10A & 11A deposit loading lines (where both fine & lumps are loaded) separately. All the loading yards are connected to reception yard giving accessibility to all the four lines of Reception cum despatch yard.

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Entry Line : Line -1		1318 M	Electrified
Loading line		CSL in Meters	
Lump	Line No 2	750	Top Wired.
	Line No 3	750	-do-
	Line No 4	750	Electrified
Fine	Line No 5	750	-do-
	Line No 6	750	Top wired.
	Line No 7	750	-do-
Deposit	Line No 8	746	Electrified
	Line No 9	746	Top wired.
	Line No 10	746	-do-

1.4

PICTURE DIAGRAM:

The painted picture diagram is also fixed at 'A' cabin and this picture diagram conforms to yard working rule diagram.

2.0

SIGNALLING AND INTERLOCKING:

2.1

SIGNIFICANCE OF SIGNALS:

The significance of the various combinations of the Multiple Aspect Colour Light Signalling lies in accordance with GR 3.08(4)(b) and 3.14.9.

2.2

OPERATION OF SIGNALS AND POINT ETC.:

The 'A' cabin is manned by LMA/TPM.

2.3

IRS DIRECT TYPE lever machine is installed with 49 levers at 'A' cabin to operate points, point locks, signals etc. and their individual function is detailed below.

LEVER NO.	FUNCTION
1	Slot for reception from BCHL East cabin
2	Spare
3	Spare
4	RYD Home for line No.2
5	RYD Home for line No.1
6	RYD Home for line No.3
7	RYD Home for line No.4
8	Spare
9	Spare
10	Spare
11	Shunt signal from 10A & 11A deposit loading yards to RYD
12	Shunt signal from lump and fine yard to RYD
13	Spare
14	Spare
15	Spare

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LEVER NO.	FUNCTION
16	Lock bar on crossover point No.18 at East end
17	Point to loading yard
18	Crossover point between entry line and RYD line No.1
19	Double lock bar on point No.18 at West end and 17 at East end
20	Holding bar on loading yard
21	Crossover point between RYD line No.1 & 2
22	Lock bar on crossover point No.21 at West end
23	Lock bar on crossover point No.24 at East end
24	Crossover point between RYD line No.2 & 3
25	Lock bar on crossover point No.24 at West end
26	Point between line No.3 & 4
27	Lock bar on point No.26 at East end
28	Control key 'P' for siding
29	Spare
30	Shunt signal from line No.2 to lump and fine yard
31	Shunt signal from line No.1 to 10A & 11A deposit loading yard
32	Shunt signal from line No.1 to lump and fine yard
33	Shunt signal on line No.2
34	Shunt signal on line No.3
35	Shunt signal on line No.4
36	Spare
37	Shunt signal from line No.2 to 10A & 11A deposit loading yard
38	Starter on line No.2
39	Starter on line No.1
40	Spare
41	Spare
42	Spare

2.3.1 PULL CHART OF 'A' CABIN:

TO RECEIVE TRAIN FROM BCHL EAST CABIN:

Line No.	Levers to be pulled
Line No.1	18, 19, 16, 5
Line No.2	4
Line No.3	23, 24, 25, 26, 6
Line No.4	23, 24, 25, 7

TO DESPATCH TRAIN FROM 'A' CABIN TO BCHL EAST CABIN:

Line No.	Levers to be pulled
Line No.1	19, 18, 16, 39
Line No.2	33, 38
Line No.3	23, 24, 25, 38, 26, 27, 34
Line No.4	23, 24, 25, 38, 35

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2.4 SHUNTING MOVEMENT TO:

Line No.	10/11A deposit loading yard	Lump and fine yard grids
Line No.1	19, 17, 31	32
Line No.2		20, 21, 22, 30, 33
Line No.3		20, 21, 22, 23, 24, 25, 26, 27, 30, 34
Line No.4	35 only for B.V. siding	

SHUNTING MOVEMENT FROM LUMP AND FINE YARD GRID TO:

Line No.	Levers to be pulled
Line No.1	12
Line No.2	22, 21, 20, 12
Line No.3	26, 27, 25, 24, 23, 22, 21, 20, 12
Line No.4	25, 24, 23, 22, 21, 20, 12

SHUNTING MOVEMENT 10A & 11A DEPOSIT LOADING YARD TO:

Line No.	Levers to be pulled
Line No.1	19, 17, 11
Line No.2	17, 19, 20, 21, 22, 11
Line No.3	26, 27, 25, 24, 23, 22, 21, 20, 19, 17, 11
Line No.4	25, 24, 23, 22, 21, 20, 19, 17, 11

3.0 LEVER COLLARS:

Lever collars are to be placed on the respective levers as shown in the tabular form whenever lines are blocked vide SR 5.04.01 and 3.36.03(b).

LINE NO.	LEVER COLLARS ARE TO BE PLACED ON LEVERS AT 'A' CABIN	
	POINT LEVERS	HOME SIGNAL LEVERS
Line No.1	18 N	5
Line No.2	18 R	4
Line No.3	26 N	6
Line No.4	26 R	7

4.0 MEANS OF COMMUNICATION:

- (i) Telephone communication is provided between 'A' cabin and SS/S.M-BCHL.
- (ii) The 'A' cabin is connected to KRPU-KRDL control circuit.

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5.0 WORKING OF TRAINS:

The movement of trains shall be regulated by the Section Controller on duty whose orders must be carried out provided they do not contravene any G&SR, OM, BWM and any other safe working principles. In the event of control being suspended the SS/S.M on duty of BCHL station shall work independently.

The YM/AYM on duty is responsible for the internal movement in the yard. The reception of trains into the yard and the engine movements are controlled by the YM/AYM on duty.

6.0 RECEPTION OF TRAINS FROM BCHL STATION TO RECEPTION – CUM-DESPATCH YARD.

The reception of trains is governed by G&SR,3.36, 3.38, 3.40 and 8.03(2)

6.1 Movement of trains from BCHL station to reception-cum-despatch yard.

Section Controller on duty will inform the SS/S.M on duty at BCHL, about the nomination of train for BCHL for offering for loading with the expected time of arrival. On getting the advise from the SS/S.M on duty at BCHL regarding the reception of a train the Cabin man on duty at 'A' cabin will inform to the YM/AYM on duty for the nomination of a clear line.

The YM/AYM shall nominate a clear line after assuring that,

- i) The line nominated is clear and free from all obstructions.
- ii) All shunting operations infringing the line nominated for reception of a train at his end of the yard are suspended. He shall repeat the nominated line to the cabin man of 'A' Cabin under the exchange of private number. After getting assurance from YM/AYM on duty, the cabin man shall ensure that, all the points for the nominated route are correctly set and locked. He shall inform it to SS/S.M on duty supported by Private number.
- iii) The cabin man of A cabin shall pull slot lever no. 1. After getting the assurance, SS/S.M on duty will authorise the Cabin man at East Cabin to take off the concerned home signal for reception of the train by pulling concerned SM's slide supported by a Private Number. After the complete arrival and berthing of the train within the fouling mark, the Cabin man of 'A' cabin will advise the SS/S.M on duty about the complete arrival of the train, supported by a Private Number in accordance with SR. 4.17.01.

To receive a train in RYD on Line no. 5, GR 5.10 shall be followed.

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6.01.4 MOVEMENT OF TRAINS THROUGH UNIFLOW RECEPTION LINE TO RECEPTION-CUM-DESPATCH YARD:-

- (a) The Section Controller on duty will inform SS/S.M on duty at BCHL about nomination of train for BCHL for loading with the expected time of arrival. On getting the advice SS/S.M on duty BCHL should inform regarding the reception of a train on Uni-flow reception line, to YM/AYM on duty at RYD for the nomination of a clear line.
- (b) The YM/AYM will repeat the nominated line i.e., any one of NMDC line No 2 to 10, shall ensure that,
- (i) The line nominated is clear from all obstructions.
 - (ii) All shunting operations infringing, the line nominated for reception of the train at his end of the yard are suspended.
 - (iii) All hand points are correctly set and locked in favour of the train.
- (c) The YM/AYM will repeat the nominated line to SS/S.M on duty under exchange of Private Number. At the same time SS/S.M shall also advise the cabin man of East Cabin to set and lock the points in favour of incoming train.
- (d) **WORKING OF KEY OPERATED POINT M1, M2 & M3**
1. Key 'M' is kept with lever No.28 in normal position.
 2. Key 'M' to be obtained after lever No.28 reversed.
 3. Key 'M' is transmitted to goomty through RKT and inserted in 'E' type lock at site to reverse point M1 or M2 or M3
- (e) **TO TAKE 'OFF' SIGNAL No.34E**
- i) After exchanging PN with YM/AYM and after confirming with the cabinman about the setting and locking of the points, the SM will release the slot No.2.
 - ii)The cabin man of east cabin after getting slot indication shall take off signal No.34E.
- (f) **TO TAKE 'OFF' SIGNAL No.3E**
- (i) The YM/AYM will repeat the nominated line i.e., any one of loading yard line shall ensure that,
 - (ii) The line nominated is clear from all obstructions.
 - (iii)All shunting operations infringing, the line nominated for reception of the train at his end of the yard are suspended.
 - (iv)All hand points are correctly set and locked in favour of the train.
 - (v)The YM/AYM will repeat the nominated line to SS/S.M on duty under exchange of Private Number. At the same time SS/S.M shall also advise the cabin man of East Cabin to set and lock the points in favour of incoming train and then he shall take 'off' signal No.3E on uniflow line..

7.0 MOVEMENT OF TRAINS FROM RECEPTION-CUM-DESPATCH YARD TO LOADING YARD:

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On getting the advice from the YM/AYM when the train is ready to despatch to the loading yard and Cabinman shall correctly set and lock the required points for the despatch of trains to loading yard, suspending all the shunt movements from the lines not isolated and then he shall take off the shunt signal of the concerned line. The signalled movement towards loading yard is only upto STOP BOARD. Beyond the stop board the movements shall be controlled by hand signals by the yard staff. Before taking OFF shunt signals, the Cabinman shall take assurance of yard staff to the effect of clamping and padlocking of the hand points in favour of the train to be placed in the loading yard supported by a Private Number.

The train will be backed under the personal supervision of YM/AYM into the loading yard and berthed properly and ensure securing of the rake on the loading line.

NOTE:

While giving placement the Match truck will be detached in the adjacent grid on the top of the line, clearing the fouling mark. The rake further pushed into the intended line. After placement of the rake in the loading line, the Match truck will be attached on train thereby the Match truck automatically reversed as rear most vehicle to the outgoing direction.

8.0 MOVEMENT OF TRAINS FROM LOADING YARD TO RECEPTION-CUM-DESPATCH YARD:

The YM/AYM shall ensure correct setting of hand operated points for the train to be received from the loading yard and clamp and padlock the non-interlocked facing points.

After getting ready with the loaded rake the YM/AYM will contact the 'A' cabin and advise him for the reception of the loaded rake. The 'A' cabin Cabinman will set and lock the points of the nominated clear line and take off the concerned shunt signals. The loaded rake will be drawn into the reception-cum-despatch yard and the powers will be reversed and attached on to the train at KTV end of the yard.

8.1 The iron ore loading siding at RYD/BCHL consists of three grids with 3 lines each for lump ore loading, fine ore loading and 10A & 11A deposit loading lines where both lump and fines are loaded. Line No.1 & 2 in the grids are used for mechanical loading and Line No.3 for detaching sick etc. All the lines are provided with OHE.

The hand operated facing points leading to loading grids are to be clamped by yard staff before allowing any movement. YM/AYM on duty shall personally supervise the placement and drawn out of rakes.

9.0 MOVEMENT OF TRAINS FROM RECEPTION-CUM-DESPATCH YARD TO ENTRY LINE:

As soon as the outgoing train is ready in all respects the YM/AYM shall inform to SS on duty as well as Section Controller.

On getting orders from Section Controller to start the train the SS/BCHL on duty will advise the Cabinman at 'A' cabin to set and lock the points for the despatch of trains.

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The Cabinman will ensure that

- (i) all shunting operations at departure end are suspended
- (ii) the concerned shunting authority issued for the shunting on the lines not isolated from the line nominated for despatch are with drawn and kept under his custody
- (iii) points for the out going train are correctly set and locked. Then he will assure the SS/S.M of BCHL the same information supported by a Private Number.

The SS/BCHL on duty after ensuring that the entry line is free from obstruction and shall permit to admit the train from RYD onto the entry line. He shall inform the Cabin man of East Cabin regarding the description of train and advise to give slot for Entry line under exchange of Private Number. Then SS/BCHL shall give slot to 'A' cabin and advise Cabin man to start the train. On getting slot indication, the Cabin man of 'A' cabin shall take off the concerned Shunt/Starter signal as well as common Starter signal. The taking off concerned Shunt/Starter signal as well as common Starter signal shall be the authority to the Loco Pilot of the train to start his train from reception/dispatch yard"

The SS/BCHL on duty after obtaining Line clear from BHNS under the system of working shall advise East Cabin man to set the out going route for the departure of the train from entry line to BHNS supported by Private Number. Taking off last stop signal from entry line will be the authority to proceed for Loco Pilot to enter in to the block section under the system of working.

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