## GOVERNMENT OF INDIA MINISTRY OF RAILWAYS RAILWAY BOARD

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No. 2015/EnHM/15/01

New Delhi, dated 16.04.2018

General Managers, All Zonal Railways मु. वा. प्र (माल भाड़ा) C.C.M. (FM)

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SUB: Pollution at Railway Sidings and Goods Sheds

A Committee of ED/EnHM/ME/RB and CCM/Catering/NR was nominated vide Railway Board's Order No. ERB-I/2016/23/19, dated 08.04.2016 and 16.01.2017/08.08.2017 to Study and submit Report on the extent of pollution in handling of pollution intensive commodities at Sidings and Goods Sheds and actions to be taken.

Based on recommendations of the Committee accepted by Board (MRS & MT), following directions are issued:

1. Keeping in view the statutory / legislative provisions

a) Wherever new siding/goods shed/Private freight Terminal/ any loading / unloading point is being developed / constructed, 'Consent to Establish' should be taken from State Pollution Control Board by the owner or the railway as the case may be in accordance with the provisions of State Pollution Control Board, keeping in view the notified areas / air pollution control areas and categorisation of Industrial Sectors.

- b) Wherever the sidings are existing, 'Consent to Operate' / 'Consent for Operation' should be obtained from State Pollution Control Board by either owner or by the railway as the case may be in accordance with the provisions of State Pollution Control Board, keeping in view the notified areas / air pollution control areas and categorisation of Industrial Sectors.
- c) Zonal Railways must be aware of Air Pollution Control Areas notified by respective SPCBs and ensure compliance to applicable environmental legislations. Necessary clause may be incorporated in agreements of sidings. For railway owned sidings and goods sheds, the responsibility lies directly with the Railways.
- d) In addition to air pollution, water pollution and noise pollution should also be taken care of depending upon the extent of pollution and environmental impact for specific commodities and locations.

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- 2. Some protective measures to be taken at loading/unloading points by the owner or railways as the case may be, are
- a) Paved approach roads with adequate traffic carrying capacity should be provided at each loading /unloading point. The existing roads which are in bad condition should be repaired and maintained.
- b) To control dust pollution, water sprinkling system through mechanised system or tankers should be provided as per requirement. Proper waste water/drainage system shall be provided at loading/unloading points as per requirement.
- c) Appropriate green belt cover to be provided at the loading/unloading point to mitigate pollution.
- d) Where necessary, the heavy loading and unloading traffic handling points to be provided with dust screen walls along periphery of the premises with adequate height.

Copy of the report of the Committee No. 2015/EnHM/15/01 dated 16.08.2017 in six pages is enclosed for necessary action by all Zonal Railways.

A Report on *Inventorisation of Railway Sidings and Guidelines for their Environment Management* submitted to Central Pollution Control Board by RITES in March 2015, which is available on the website of CPCB **cpcb.nic.in** under New Reports, may also be seen for guidance.

Encl: Report of the Committee in six pages.

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(Shivendra Mohan) Executive Director EnHM / ME

Copy to PCCMs, All Zonal Railways

Report of the Committee to Study the extent of pollution in handling of pollution intensive commodities at Sidings and Goods Sheds and action to be taken.

#### 1.0 Background

Ministry of Railways (Railway Board), vide Order No. ERB-I/2016/23/19, dated 08.04.2016 and 16.01.2017, constituted a Committee to study and submit report on the extent of pollution in handling of pollution intensive commodities at Sidings and Goods Sheds and actions to be taken. Accordingly, following officers were nominated by Board-

- Shri Shivendra Mohan, ED/EnHM/ME/Railway Board as (i) ·
- Smt. Archana Srivastava, CCM/Ctg/NR as Member (ii)

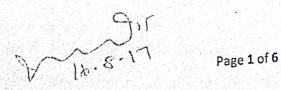
Terms of Reference given to the Committee are as follows -

- · To study and submit report on the extent of pollution in handling of pollution intensive commodities at Sidings and Goods Sheds and action to be taken.
- The Committee can take assistance of an expert Consultant for arriving at their final recommendation. Expert consultant will be engaged by EnHM Directorate through a Railway PSU.

#### Methodology 2.0

The Committee on the basis of terms of reference held discussion with officials of RITES who had studied and prepared a report on Inventorisation of Railway Sidings and Guidelines for their Environment Management. Besides, Committee held discussions with number of Zonal Railways and former Member Secretary of CPCB. Committee also went through a number of documents available on the subject. The main documents are listed below-

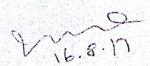
- (i) Legislation on the subject- "The Air (Prevention and Control of Pollution) Act, 1981" and its amendment issued in 1987.
- (ii) Directives/Circulars on the subject issued by the Ministry of Railways. him



- (iii)Report on Inventorisation of railway sidings and guidelines for their environment management submitted to Central Pollution Control Board by RITES in March 2015. This report is available on the website of CPCB cpcb.nic.in under New Reports.
- (iv) Final document on Revised Classification of Industrial Sectors under Red, Orange, Green and White Categories (February, 2016) published by CPCB.
- (v) Reports from various Zonal Railways on sidings/goods shed etc.

### 3.0 Observations

- 3.1 During the preliminary meetings held by the Committee it was decided to collect data from Zonal Railways so that field position can be assessed. Further, Committee also went through report on Inventorisation of railway sidings and guidelines for their environment management in detail and decided that since complete study has been done by RITES prior to finalization of the report therefore, it was felt that there is no need to engage any consultant for further studies.
- 3.2 Committee on the basis of discussions and data collected from Zonal Railways noted that on some of the Zonal Railways for some of the commodities, consent from State Pollution Control Board either is taken prior to opening of siding or of the existing siding. This is mainly subjective and largely dependent on the fact that wherever there has been issues raised by the local public or a case filed by the local public with State Pollution Control Board, the railways have gone ahead and taken permission.
  - 3.3 Further, it was observed by the Committee from the Report on Inventorisation of railway sidings and guidelines for their environment management that mostly the sidings have some or other kind of pollution control mechanism already in place wherever there is manual loading/unloading. For example-water sprinkler, covering of material by plastic sheets, plantation etc. However, it is felt that in some cases these measures are either not sufficient or are not covering the Pollution Control Board's guidelines as such there is need to upgrade the same.
  - 3.4 The committee also observed that different kind of measures are required for managing pollution of different kind from different type of commodities.



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### (i) Coal and mineral handling points

Generally, dust pollution in such sidings is much more as compared to rest of the commodities. Hence the sidings involving these commodities need more protective measures to minimise the generation of dust pollution from various activities involved at sidings. It is felt by the committee that-

- As far as possible loading /unloading of such commodities should be kept away from the residential area, school/colleges, Historical Monuments, Religious Places, Ecological sensitive areas as well as forests areas.
- The sidings should preferably have mechanized loading/unloading system from rolling stock.
- Efforts should be made to minimise/ reduce drop heights so as to control spreading of dust during loading and unloading operations.
- The stockpile should have adequate dimensions so that wind erosion from the stockpile will be minimum. The loading/unloading at stockpile should preferably be done by mechanised means.
- Sidings should have paved approach roads with adequate traffic carrying capacity. The existing haul roads which are in bad condition should be repaired and maintained. The roads should have proper camber to avoid the water logging on the roads.
- The heavy loading and unloading traffic siding should preferably have dust screen walls all along periphery of the premises with adequate height.
- Water sprinkling system should be used at loading /unloading point and along the haul roads either mechanised or through water tankers.
- Proper waste water/drainage system shall be provided at sprinkling area of loading, unloading and storage so that water drained is collected at a common tank and can be reused.
- The loading/unloading points should be provided with thick rows of plantation having tall growing trees all along the periphery, inside and outside of the premises and along the road.

## (ii) POL handling points

The Committee feels that in case of POL unloading/loading points following is required-

 All components of POL loading /unloading depot should be designed and maintained as per specified standards of oil companies fulfilling safety provisions (OISD standards).

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• The loading/unloading operation shall be carried out under

close supervision of authorised person.

• Network of drainage system along the rail track to collect drained oil from various equipment and other places of likely oil spillage. The drainage shall lead to oil water separator (OWS) / effluent treatment plant (ETP).

· Loading points to have quick shut-off valves to avoid

leakages.

· Waste water and storm water collection and disposal system.

• Roads should be provided to serve all areas requiring access for the operation, maintenance and fire fighting.

# (iii) Other loading/unloading points

It has been noted by the Committee that the major dust pollution is generated through haul roads at food grain, fertilizer, other common commodity handling points. Haul roads at many sidings of this category are in bad condition and need immediate repair.

Sidings should have paved approach roads.

 Water sprinkling system through mechanised system or tankers should be provided as per requirement.

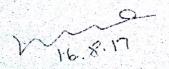
• These siding shall ensure regular sweeping of dust from road and also ensure that there is adequate space for free movement of vehicles.

• Proper waste water/drainage system shall be provided at sidings/goods sheds.

• The waste water should be collected at a common tank and can be reused after screening or providing effective treatment.

• The siding area should have thick green belt cover to control the air and noise pollution.

- In C & AG report no. 21 of 2012-13 (Railways) Para 2.3.1 it is noted that Railway Board had stipulated (June' 2009) that before issue of Railway Receipt for booking of freight (Iron ore, steel and cement) Railway Administration should ensure one time submission of consent for operation (CFO) to the Sr. DCM of the Division in which the loading takes place. Test check by Audit revealed that CFO was obtained only for 55 % (19 out of 34) sidings. It is also noted that some Railways are interpreting Railway Board's instructions of June' 2009 as though obtaining of CFO was not required for sidings with only unloading facilities.
  - 3.6 Third report of **Public Accounts Committee** (2014-15, 16th Lok Sabha) Environment Management in Indian Railways, Stations, Trains & Tracks have stated that consent for operation from State Pollution Control Board was obtained in only 55% of



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the sidings test checked. Specific guidelines have not been issued to Zonal Railways for obtaining consent for operation (CFO) under Air (Prevention and Control of Pollution) Act 1981 from the SPCB concerned. This has resulted in inconsistency and variable understanding of issue by various Zonal Railways.

3.7 In the Revised Classification of Industrial Sectors under Red, Orange, Green and White Categories (February, 2016) published by CPCB, Industrial Sectors have been categorised under Red, Orange, Green and White Categories. 'Mineral stack yard / Railway sidings' have been included in Green Category. 'Facility of handling, storage and transportation of food grains in bulk' is also included in Green Category. State Pollution Control Boards can do additions to this list. Obtaining 'Consent to Operate' is not necessary only for White Category of Industries.

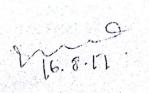
#### 4.0 Statutory Provisions

From the Air (Prevention and Control of Pollution) Act, it is noted that -

- (a) As per provision in Sec. 21 (1) & (2), no person can establish or operate any industrial plant without the previous consent of State Pollution Control Board. Every application for consent shall be made in Form I and shall be accompanied by prescribed fee.
- (b) U/S 22, 22(A) operating any industrial plant so as to cause emission of any air pollutant in excess of standard laid down by State Board is liable for litigation by the Board.
- (c) U/S 19 of the Act, the State Govt. in consultation with SPCB is vested with power to declare Air Pollution Control Area in which provisions of the Act shall be applicable.

#### 5.0 Recommendations

- 5.1 Keeping in view the statutory / legislative provisions it is recommended that
  - a) Wherever new siding/good shed/Private freight Terminal/ any loading unloading point is being developed / constructed, 'Consent to Establish' should be taken from State Pollution Control Board by the owner or the railway as the case may be in accordance with the provisions of State Pollution Control Board, keeping in view the



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notified areas / air pollution control areas and categorisation of Industrial Sectors.

- b) Wherever the sidings are existing, 'Consent to Operate' / 'Consent for Operation' should be obtained from State Pollution Control Board by either owner or by the railway as the case may be in accordance with the provisions of State Pollution Control Board, keeping in view the notified areas / air pollution control areas and categorisation of Industrial Sectors.
- c) Zonal Railways must be aware of Air Pollution Control Areas notified by respective SPCBs and ensure compliance to applicable environmental legislations. Necessary clause may be incorporated in agreements of sidings. For railway owned sidings and goods sheds, the responsibility lies directly with the Railways.
- d) In addition to air pollution, water pollution and noise pollution should also be taken care of depending upon the extent of pollution and environmental impact for specific commodities and locations.
- 5.2 Committee also recommends some protective measures to minimise air pollution at loading/unloading points by the owner or railways as the case may be and are listed below
  - a) Paved approach roads with adequate traffic carrying capacity should be provided at each loading /unloading point. The existing haul roads which are in bad condition should be repaired and maintained.
  - b) Water sprinkling system through mechanised system or tankers should be provided as per requirement. Proper waste water/drainage system shall be provided at loading/unloading points.
  - c) The loading/unloading point should have adequate green belt cover to control pollution.

d) Where necessary, the heavy loading and unloading traffic handling points to be provided with dust screen walls along periphery of the premises with adequate height.

(Shivendra Mohan) ED/EnHM/ME/RB

Convenor 16.08.2017 (Archana Srivastava)
CCM/Catering/NR
Member
16.08.2017

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