VARDHMAN ISPAT UDYOG
(Auth. Distributor – KAMDHENU STEEL)
VILL – BATHRI, TEHSIL HAROLI,
NEAR TAHLIWAL, DIST. UNA - 174301

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To, **Date:**
The Director,
Expert Appraisal Committee (EAC) Industry-1,
Ministry of Environment Forest & Climate Change,
Jor Bagh Road, New Delhi-110003.

Subject: Capacity expansion of Steel Manufacturing Unit by replacing existing Induction Furnace and enhance production capacity 45,000 MTPA to 1,40,000 MTPA by **M/s Vardhman Ispat Udyog** located at Village- Bathri, Dist.-Una, Himachal Pradesh- **Environmental clearance regarding- Reply toEDS.**

Reference: 1. MoEF&CC File No. J-11011/187/2019-IA.II(I) dated 07.09.2019

Dear Sir,

Our Project for Capacity expansion of Steel Manufacturing Unit by replacing existing Induction Furnace and enhance production capacity 45,000 MTPA to 1,40,000 MTPA by **M/s Vardhman Ispat Udyog** located at Village- Bathri, Dist.-Una, Himachal Pradesh for environmental clearance has been uploaded on 19.02.2020 and wherein the MS had rose some observations. The point-wise reply of observations is as follow:

S. No.	Observation	Reply
1	FORM 2: In S. No. 7.1, authenticated English translation of the PH proceedings has not been furnished.	Uploaded in designated slot of Form 2.
2	In S. No. 9.1, certified compliance report of CTO conditions from HPPCB has not been submitted	Uploaded in designated slot of Form 2.
3	In S. No.14.1, the limit for PM10 is already reached the threshold limit of 100µg/m^3. Reasons for the same shall be furnished.	A reason for threshold limit of PM10 is attached as **Annexure 1.**
4	In S. No. 15.1, permission for 31 KLD of groundwater withdrawal is yet to be obtained.	Uploaded in designated slot of Form 2.
5	EIA Report: Lay out of the plant site is not legible.	Revised layout incorporates in EIA Report and uploaded in designated slot of Form 2.
6	In AAQ monitoring, presence of ammonia, ozone and lead has been reported. Source for the same has not been mentioned.	The Source for the same has been mentioned in **Annexure 1.**
7	EMP is not specific to the project.	EMP is revised and incorporated in EIA report.

Yours Truly

For Vardhman Ispat Udyog

Subodh Singla

(Partner)

Annexure 1

Query: In S.no. 14.1, the limit for PM_{10} is already reached the threshold limit of 100 µg/m^3. Reasons for the same shall be furnished.

Reply:

Parameter	Conc. Level	Prescribed Limit
RSPM (PM_{10})	55 – 99 µg/m^3	100 µg/m^3

PM_{10} ranges from 55 to 99 µg/m^3 in the study area with the maximum value recorded at the project location. However mass levels of PM_{10} during few sampling days approaches to prescribed limits. The project site is situated in the downwind direction of industrial area of Tahliwal as well as industrial areas of Una & Gagret, which adds up to the PM_{10} values. Main sources of PM_{10} in the study area are industrial, construction, mining and anthropogenic activities in the region. Apart from local and regional sources, transboundary migration from one place to another could be anticipated as external sources, as respirable dust can remain in air from hours to days and can move from meters to hundreds of kilometres. Hot and turbulent winds in summer season leads wind storms and dusty conditions in the region. However to improve the environment, industry will be providing Bag filters based on latest technology, paved area inside the premises so that no dust is generated due to truck movement, tree plantation on 33% of the plot area which all will help in reducing the PM_{10} values.

Query: In AAQ monitoring, presence of ammonia, ozone and lead has been reported. Source for the same has not been mentioned.

Reply:

(a) Ammonia:

Parameter	Conc. Level	Prescribed Limit
Ammonia (NH_3)	<30 µg/m^3	400 µg/m^3

Ammonia (NH_3) concentration levels ranges from 13.5 to 26.6 µg/m^3. Ammonia (NH_3) levels <30 µg/m^3 in the study indicates that air quality is well within prescribed limits and satisfactory. Ammonia originates from both natural and anthropogenic sources. Ammonia comes from the breakdown and volatilization of urea. Agriculture-related emissions of ammonia include biomass burning or fertilizer manufacture. Ammonia is also emitted from a range of non-agricultural sources, such as catalytic converters in petrol cars, landfill sites, sewage works, composting of organic materials, combustion, industry and wild mammals and birds. Approx. 52% of study area is agricultural as indicated in the land use map. Apart from this, burning and open dumping of solid waste may be sources of ammonia in the study area.

(b) Ozone:

Parameter	Conc. Level	Prescribed Limit
Ozone (O_3)	<30 µg/m^3	180 µg/m^3

Ozone (O_3) concentration levels ranges from 11.7 to 44.5 µg/m^3. Ozone levels <30 µg/m^3 in the study indicate air quality is within prescribed limits and satisfactory. Ozone is not emitted directly into the air, but is created by a photo chemical reaction between two precursors — oxides of nitrogen (NOx) and volatile organic compounds (VOC) in the presence of sunlight. Presence of ozone precursors as oxides of nitrogen (NOx) is associated to fuel combustion in transport and industrial sector and volatile organic compound (VOC) are associated to fugitive emissions of fuels, paint, dye, chemical and solvent industry. Incineration and open burning of waste can be another source.

(c) Lead:

Parameter	Conc. Level	Prescribed Limit
Lead (Pb)	<0.1 µg/m^3	1 µg/m^3

Lead (Pb) levels are less than 0.1 µg/m^3 in the study area. Airborne lead is a naturally occurring element in the environment and may also be a by-product of industrial processes. Sources of lead in the air are metals processing, lead smelters, waste incinerators, utilities, coal feed boilers, and lead-acid battery manufacturers. The study area is situated in the downwind direction of industrial area of Tahliwal as well as industrial areas of Una & Gagret. Apart from local and regional sources, transboundary migration from one place to another could be anticipated as external sources, as particulate lead can suspend in air from hours to days and can move from meters to hundreds of kilometres.