

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

ORIGINAL APPLICATION No. 459/2018
(Earlier O.A. No. 196/2014 (CZ))

IN THE MATTER OF:

RASHMI SINGH AND ANR.

... APPLICANTS

VERSUS

NATIONAL THERMAL POWER CORPORATION AND OTHERS

.....RESPONDENTS

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THROUGH

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**PLACE: NEW DELHI
DATE: 05.04.2021**

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**RESPONSE TO THE REPORT DATED 05.03.2021 FILED BY THE JOINT
COMMITTEE AND DISTRICT ADMINISTRATION DATED 01.03.2021**

MOST RESPECTFULLY SHOWETH:-

1. That by its Order dated 27.02.2020 this Hon'ble Tribunal directed that the issues taken up by the Applicants may be considered by the Joint Committee constituted in *O.A. No. 200/2018, Dukalu Ram & Ors. v. Union of India & Ors.*

The members of the Joint Committee were as under :-

- (i) Dr. R. P. Mishra, Scientist-D, Central Pollution Control Board, RD, Bhopal
- (ii) Dr. P. R. Sakhare, Scientist-D, Ministry of Environment Forests & CC, RO, Nagpur
- (iii) Dr. Saransh Mitter, District Collector Bilaspur

2. That after the site visit the two members of the Joint Committee i.e Representatives of MoEF&CC and CPCB have filed a separate Report dated 05.03.2021 which is not signed by the District Collector. The District Administration has filed a separate Report dated 01.03.2021 which clearly highlights a divergence of views between the Joint Committee members i.e MoEF&CC and CPCB representatives on one hand and District Collector on the other. The Applicant's Response to the Reports is as follows:

COVERING OF COAL WAGONS

3. That according to the Joint Committee's Report NTPC has started covering of coal wagons from 20.08.2020 with tarpaulin after Hon'ble Supreme Court upheld

the order, in an appeal filed by NPTC. It is stated that the above finding is negated by the Report of the District Administration as in it's Report at pages 2190 and 2200 the District Administration states that:

"The spot verification of the coal transported from Korba Coalfields by captive MGR showed that the wagons are covered using tarpaulin and in these tarpaulin sheets there is considerable amount of wear and tear (Annex. A)

Hence the wagons are partially covered."

4. In the Report of the district Administration it is also mentioned different dates i.e on 12.02.2021(page 2207), 13.02.2021(page 2208), 15.02.2021(page 2209) on which they have conducted site inspections in which the tarpaulin covering of coal wagons is torn. The matter had come up before the Court of Tehsildar, District Bilaspur where the issue of torn tarpaulin on coal wagons has come up on 16.02.2021 (page 2206). The District Administration has also annexed photographs corroborating it's stand to this effect from page 2210 showing torn tarpaulin covering the wagons.

70 ACRES OF ADDITIONAL LAND AT SALER VILLAGE WILL BE ACQUIRED BY NTPC FOR ASH BASED UNITS

5. That it is mentioned that 70 acres of revenue land has been identified at Saler Village which has got transferred to Dept. of Industries, Govt. of Chhattisgarh and then to CSIDC. CSIDC has sought approval from concerned authorities and the same is awaited. NTPC is pursuing the matter with CSIDC for early implementation. All in all it is clear from a mere reading that the above mentioned EC condition No. (ix) is not being complied with as according to the Report of the District Administration " No land has been earmarked by NTPC on it's own for ash based units of brick making. Also the land in Saler village has been acquired by CSIDC and CSIDC plans to use the same for Micro Small Enterprises Cluster Development (ANNEX E). Not complied" (page 2194).

FLY ASH UTILIZATION ISSUE

6. That according to the Applicant the EC condition pertaining to Fly Ash utilization condition is being blatantly violated and even 49.54% figure of use is not correct as maximum portion of the ash is being used for raising height of ash dam.

According to the Report of the District Administration dated 01.03.2021 at page 2191 it is stated that:-

"No accounting has been provided by NTPC for ash which remains unutilized from the previous years. Hence only 12% of fly ash has been utilized till date which does not follow Fly Ash utilization policy 1999."

7. A page 2195 it is mentioned that , "However as per NTPC only 12% of fly ash generated has been utilized till the 9th year of it's operation. Hence it is far behind it's target from fly ash utilization". This aspect has not been dealt with by the Joint Committee in proper perspective.
8. That the Joint Committee has also annexed a study on heavy metals in coal and fly ash done by the IICT Hyderabad. It is stated by the Applicant that the IICT report clearly shows large number of heavy metals in coal and fly ash at page 1808 (Annexure 11) of the Joint Committee's Report. The CPCB may be asked to develop a Threshold Limit Value (TLV) for coal and fly ash with respect to thermal power plant

ZERO LIQUID DISCHARGE

9. That a perusal of Joint Committee's Report shows that it is falsely stated that all conditions of MPSPCB's NOC dated 5th March, 1997 has been complied with. Condition No. 7 of the MPSPCB's NOC annexed with Original Application states that Zero Liquid Discharge had to be achieved but a perusal of Annexure 6 at Page 53 with the Original Application, Additional Affidavit of Applicant dated 21.01.2016 and para 7 of Reply to CECB's Affidavit of October, 2019 at pages 1082 to 1087 shows that there has been a discharge of polluted water from Ash dams and how such pollution is causing the land to become marshy and causing damage to the crops.

10. The District Administration in it's Report at page 2198 state:-

However as per the Map given by NTPC and field verification marshy land has been noticed in areas nearby dykes (ANNEX I-a)
Also in the field visit by the team, around the dyke area it was found that considerable area has been turned into marshy land like areas in village Rank (Annex I-b)"

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11. That as per Recommendation 2 of the Joint Committee's Report, NTPC Sipat needs to conduct an in-depth study through any reputed institute to find out the reasons for water logging in the fields near Ash Dyke. The scope of work shall also include providing various options for remediation of agricultural field. Even the District Administration's Report has observed marshy areas around the ash dykes to be **subsurface leakage** from the dykes. Therefore, there is an urgent need to remedy the situation of **subsurface leakage around the Ash dykes in the surrounding agricultural fields.**

SULPHUR CONTENT IN COAL

12. That it is stated that the EC had a condition No. 2 (viii) of using coal of only 0.24% sulphur. The NTPC violated this condition till 2014 and got the condition amended during the pendency of this application. Even the new norm 0.40% sulphur content is being violated as the sulphur content is much higher as evident from the chemical property chart filed by the applicant earlier. Annexure A8 at page 58 with the Original Application and Additional Affidavit dated 21.01.2016 at para 6 may kindly be perused in this regard which clearly show that the sulphur content in the coal derived from Korba Coal fields is more than 0.40%. Copy of the chemical property chart of Western Coalfields Ltd. (A subsidiary of Coal India Ltd.) filed by the applicant earlier as Annexure A8 at page 58 with the Original Application is again annexed herewith as **ANNEXURE-1**

13. According to the Report of the District Administration at page 2190 states that:-

"As per verification, no report has been presented by NTPC which states about the sulphur content of coal. Only a research paper from IIT Delhi 2004 has been submitted which gives a generic view about Indian Coal."

GREEN BELT

14. That it is stated that the NOC of MPSPCB provides that green belt condition has to be complied with. It is stated that this condition has been violated blatantly by the Project Proponent. False information has been submitted by NTPC to MoEF&CC which has not been verified independently. The Google image

produced by the applicant has a calculation that instead of 259 acre of green belt area as claimed by the NTPC, hardly 120 acre can be considered as green belt. (Page 18 of the Rejoinder dated 10.12.2015, Para 9 of the Additional Affidavit of November, 2016 and Rejoinder of August 2016 to Collector's report may kindly be perused in this regard.)

15. That the Joint Committee's Report says 262329 trees have been planted in 215 acres of the land which comes to 3015 trees/ha. However, it does not show the survival rate. Therefore, just plantation of the trees cannot be considered as compliance of EC condition to have a green belt with a tree density of 1500-2000 trees/ha.
16. That the green belt plantation claimed by the NTPC is not on the periphery of the plant and they have planted trees in some other areas. Copy of the Google Map highlighting that NTPC has not developed any Green Belt in the periphery of the Plant is annexed as **ANNEXURE-2**.
17. That a perusal of the Report of the District Administration at page 2201 states that the EC condition of Dense avenue plantation which was to be developed on either side of the track wherever habitation/agricultural lands in consultation with local forest department to minimize the dust and noise pollution,, the same has been mentioned to be "Partially Complied" with.
18. That a perusal of the Report titled "To study the impact of coal transportation among villagers residing along the railway track from Dipka mines to NTPC Ltd., Sipat by CIMS, Bilaspur-Annexure-17 which talks about at page 1898 that " Around MGR track-inadequate green belt was seen along the MGR track".

SOIL TESTING REPORT

19. That the report of Assistant Soil Testing Officer, Bilaspur at pages 1996-1997 clearly spells out about significantly low nitrogen in cropland of all the six villages. It is a well-known fact that Nitrogen, Phosphorus and Potassium are considered as an essential nutrient in agricultural practices. Low nitrogen concentration will certainly affect the crop yield in these villages. The report further also revealed that almost 50% of the collected soil samples is having low

nitrogen which clearly shows less microbial activity which is essential of the natural decomposition process of organic matter.

20. That earlier the Joint Committee had filed a Report dated 24.07.2020 in which annexure 7 was a Preliminary Studies on Impact of Coal Dust on Soil, Crop and Tree Species due to Open Wagon Coal Transportation by Indira Gandhi Krishi Vishwavidyalaya, Bilaspur, Chhattisgarh. This Report is silent on distance wise total number of samples collected in various zones i.e. Crop land, forest and mixed zones. Report is also silent on the depth of samples used for the analysis of the Physic-chemical characterises of soil which is very important factor for determination of soil quality with respect to crop. The physic-chemical characterises of soil has been not given with respect to samples collected at various distance on the both the side of the track to in various zones i.e. Crop land, forest and mixed zones ascertain zone of influence. The Report clearly says that the grain yield is significantly lower within 10 meter distance of the railway track

AIR POLLUTION ISSUE

21. That in response to EC condition "Keeping in view the location of Sonthi Pahar Reserved Forest, additional Monitoring Station should be installed at the site to assess the ambient air quality. Monitoring should be initiated immediately to ascertain the project status and the scenario after commissioning of the project. A special study should be undertaken to ascertain impact of SO₂ on the flora in the project impact zone particularly the forest patches", it is stated that no additional Monitoring Station has been installed at the site to assess the ambient air quality. There is no special study undertaken to ascertain impact of SO₂ on the flora in the project impact zone particularly the forest patches. Hence this EC condition has not been complied with.

HEALTH STUDY

22. That according to the Report of the District Administration at page 2203 it is mentioned that "NTPC has submitted a study conducted by CIMS Bilaspur in

which sample of 900 people staying in around MGR Korba and Bilaspur were taken and as per the study 21.4 % have reported to have breathing difficulties. 17.2% people have stated cough problem, 12.1% have chest congestion, 12.3 % have stated chest pain due to coughing, 8% have stated heavy breathing and 7.8% have stated insomnia."

That even the Joint Committee has annexed this Report titled "To study the impact of coal transportation among villagers residing along the railway track from Dipka mines to NTPC Ltd., Sipat by CIMS, Bilaspur-Annexure-17 which talks about various health problems of Respondents at pages 1898 -1899.

- (i) Breathing difficulties
- (ii) Cough problem
- (iii) Chest congestion
- (iv) Chest pain due to coughing,
- (v) Heavy breathing
- (vi) Insomnia

23. That it is stated that the study of study conducted by CIMS Bilaspur is only with respect to Corridors where Rail transport is moving and the findings that 21.4 % people are having breathing difficulties in a Rail corridor area is very high. It is stated that when the momentary exposure is so high the Health impacts on people in areas where it is mined i.e Coal Mines, areas where it is kept and burnt i.e Thermal Power Plants and areas having fly ash, the adverse health impact would be much higher and requires detailed assessment.

Therefore the following actions are proposed by the Applicant:-

1. Directions for conducting an in-depth study to identify the nature and extent of pollution in communities around coal-fired thermal power plant, and undertake clean up measures - air, soil and water sources (surface and underground). (For Health Study - involve state department of health, State Health Resource Center Chhattisgarh and Dept of Community Medicine from Raipur Medical College).

2. Direct the Health Department to provide proper health care and specialised treatments free of cost for all residents living within 10 KM of the coal-fired power plants. (cost of healthcare to be borne by the polluter), in line with *Dukalu Ram* order.
3. Undertake measures so that the populations have safe water for drinking and other uses.
4. Initiate comprehensive and continuous monitoring of emissions in air, soil water sources, drinking water and fish in the region.
5. Apprehend polluters and take corrective remediation action to bring the levels of dust and heavy metals in residential areas to below detection limits.
6. Award the affected families punitive damages for responsible companies causing pollution neglecting norms and standards.
7. Impose a moratorium on any further expansion of the existing mines or setting up of new industries until comprehensive health impact assessments of the power plant is completed and its recommendations are implemented.

ISSUE OF SURFACE WATER

24. That in response to EC condition, "Monitoring of surface water quantity and quality shall also be regularly conducted and records maintained. The monitored data shall be submitted to the ministry regularly. Further, monitoring point shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring of heavy metals in ground water shall be undertaken" it is stated that the number of parameters for which analysis has been undertaken by Public Health Engineering Department is not in accordance with Indian standard drinking water specification i. e IS10500:2012 (as amended 1st June, 2015). Therefore, No Indian standard on drinking water have been used in this case.

25. That by its order dated 27.02.2020 this Hon'ble Tribunal had directed in para 11 that:-

"...Wherever there is a 'partial compliance' or 'being complied', full compliance may be ensured and compliance report filed by 31.05.2020 to the Committee constituted by this Tribunal on 14.02.2019 in *O.A. No. 200/2018, Dukalu Ram & Ors. v. Union of India & Ors...*"

26. That it is stated that a perusal of the Report dated 01.03.2021 of the District Administration shows that the following EC conditions are either Partially Complied with or Being Complied.

| S.No. | EC/NOC of MPPCB | Status of Compliance as per the Report of the District Administration's Report who have conducted a site visit of the area | Page No. of the paper-book |
|-------|---|--|----------------------------|
| 1. | Sulphur content in Coal/Wagon coverage by Tarpaulin | Partially Complied | 2190 |
| 2. | Fly Ash utilization | Partially Complied | 2191 and 2195 |
| 3. | 70 acres of additional land at Saler village will be acquired by NTPC for ash based units | Not Complied | |
| 4. | Zero Liquid discharge | Not Complied | 2198 |
| 5. | Green Belt development/Avenue Plantation | Partially Complied | 2201 |
| 6. | Health Survey study | Partially Complied | 2203 |

27. It is important to point out here that any condition which is 'Partially Complied with' also means it is 'Partially Not Complied'.

28. Therefore, in view of the above submissions/response it is clear that NTPC has not only not complied with the EC and NOC conditions of MPPCB but also the

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Order dated 27.02.2020 passed by this Hon'ble Tribunal as there are a number of EC/NOC conditions which are either 'partially complied' with or 'not complied' with and therefore necessary directions are forthwith required to be passed for imposing Environmental damage/remediation cost against NTPC and directions with respect to Health Issue may be granted as mentioned in para 23 above.

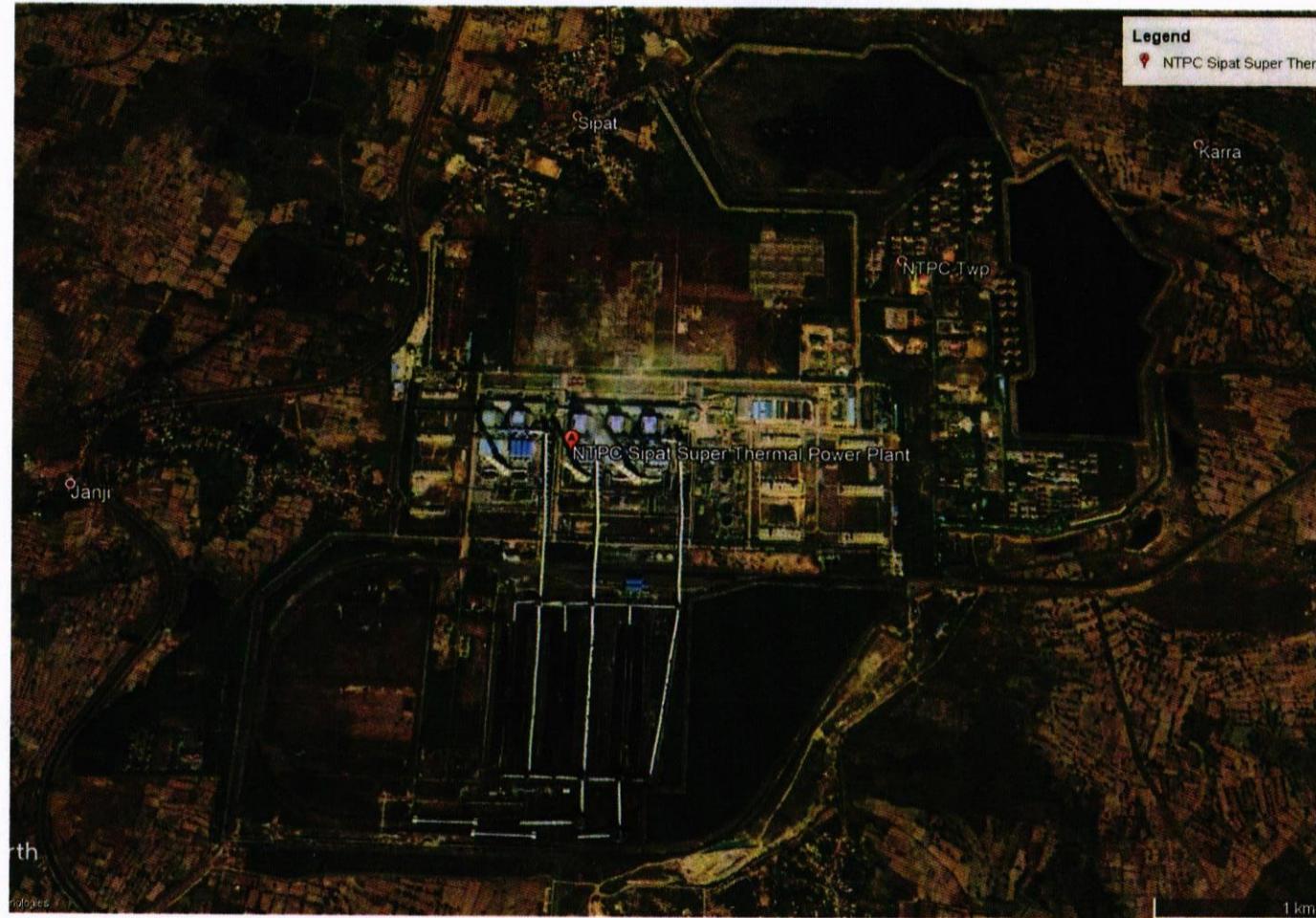
THROUGH



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Annexure A-1



T.C.
YH

Annexure A - 12
A-2

Chemical Properties of Coal from Different Coalfields of India

Annual Quality Requirements, 1987-88
Quality Control Dept., WCL, Nagpur.

| COAL FIELDS | Seams | Analysis on air-dried basis | | | | Analysis on dry mineral matter free basis | | | | LTGA Coke Type | |
|--------------------------|------------------------------|-----------------------------|---------|-------------|----------------|---|-------------------------|------------|--------------|----------------------|---|
| | | Moisture (%) | Ash (%) | Sulphur (%) | Phosphorus (%) | Volatiles Matter | Caloric Value (kcal/kg) | Carbon (%) | Hydrogen (%) | | |
| Sone - Mahanadi Valley | | | | | | | | | | | |
| Singrauli | | | | | | | | | | | |
| aj | Raniganj Formation | | | | | | | | | | |
| | Jhingurda | 8-9 | 25-35 | 0.4-0.6 | 0.01-0.04 | 40-42 | 7095-7300 | 76-78 | 4.5-4.8 | A | |
| bj | Barakar Formation | | | | | | | | | | |
| | Turra, Purnwa | 7-9 | 15-30 | 0.5-0.7 | 0.02-0.03 | 37-45 | 7640-7750 | 78-81 | 4.4-5.3 | A | |
| Jharkhand | | | | | | | | | | | |
| aj | Pangdi Koria | | | | | | | | | | |
| | Kailashpand, K | 8-9 | 15-30 | 0.4-0.6 | 0.01-0.03 | 34-40 | 7740-8065 | 78-81 | 4.4-5.2 | A | |
| aj | Chirch - Kalkona etc. | | | | | | | | | | |
| | | 5-8 | 15-25 | 0.3-0.6 | 0.002-0.00 | 33-40 | 8220-8440 | 85-87 | 4.8-5.2 | C-D | |
| aj | Chilchiri | | | | | | | | | | |
| | | 7-8 | 12-20 | 0.5-0.4 | 0.00-0.01 | 36-38 | 7750-8300 | 80-83 | 4.8-5.2 | A | |
| aj | Pasang, Palspahar, etc. | | | | | | | | | | |
| | Korba | 5-8 | 14-18 | 0.4-0.8 | 0.004-0.01 | 35-38 | 7800-8400 | 80-83 | 4.2-4.8 | A | |
| aj | Koldampur | | | | | | | | | | |
| | Jatra, Ghordeva, etc. | 6-9 | 15-35 | 0.5-0.8 | 0.005-0.0 | 32-41 | 7780-8170 | 81-84 | 4.2-5.3 | A | |
| aj | River | | | | | | | | | | |
| | ib, Rampur, Lakura, etc. | 7-10 | 15-20 | | | 35-38 | 7300-7800 | 78-81 | 4.2-4.8 | A | |
| aj | Talcher | | | | | | | | | | |
| | I-IV | 6-8 | 15-40 | 0.5-0.7 | 0.003-0.04 | 32-40 | 7400-7800 | 78-84 | 4.3-5.1 | A | |
| Panch-Kanhan-Tara Valley | | | | | | | | | | | |
| Dasa West | | | | | | | | | | | |
| | Ravenwara, etc. | I-III | 2-6 | 15-25 | 0.5-0.7 | | | | | | |
| | Damus, Rakhal, etc. | II-III | 2-5 | 18-24 | 0.6-1.0 | 32-38 | 7650-8140 | 82-85 | 4.8-5.4 | C-D | |
| | Pathakhara | I-IV | 2-4 | 25-30 | 0.5-0.8 | 32-38 | 8520-8710 | 86-89 | 5.1-5.5 | D-F | |
| | Tanda - Kharak area | I-III | 2-4 | 20-25 | | 33-40 | 8500-8790 | 84-86 | 5.4-5.8 | C | |
| Wardha Valley | | | | | | | | | | | |
| | Kampale, Umrar, Pipa etc. | II-IV | 7-10 | 15-30 | 0.5-0.9 | | | | | | |
| | Meyri, Balarpur, Ghugus etc. | I-IV | 8-11 | 15-25 | 0.4-0.8 | 35-40 | 7250-7860 | 78-82 | 4.2-4.6 | A | |
| Godavari Valley | | | | | | | | | | | |
| | Kothagudem, Tandur, | | | | | | | | | | |
| | Salar Jung, King, | | | | | | | | | | |
| | Ramagundam, etc. | | | | | | | | | | |
| | Queen, Ross, etc. | 6-8 | 15-25 | 0.3-0.7 | 0.005-0.04 | 35-40 | 7300-7950 | 78-82 | 4.2-5.1 | A | |
| | Gollat, Lingole, Belampalle | I-IV | 5-8 | 15-30 | 0.4-0.8 | -0.048 | 35-42 | 7590-8000 | 78-83 | 4.5-5.4 | A |

Handwritten signature

T.C
M.K

