

Note on the final notification on 21 May, 2020 (amendment in draft Notification vide number G.S.R. 02(E), dated 2nd January, 2014) which mandated coal based thermal power plants to use raw or blended or beneficiated coal with ash content not exceeding 34 per cent

There are no significant changes in the final notification as compared with the draft notification. Similar to the draft, final notification has allowed power plants to use unwashed coal irrespective of distance from the mine.

The final decision has been taken considering; coal quality from the mines has improved; Implementation of notifications like new thermal power norms and fly ash notification, will automatically take care of the issues which may arise due to the use of unwashed coal. In case of washeries operations, washeries reject cannot be used anywhere other than FBC based plants.

A few points regarding the ash pond maintenance are removed since these may not be uniformly applicable to every plant due to the difference in the ash handling technology. With that, government has made it clear that no additional ash pond area will be provided and 100 per cent ash utilization has to be achieved as per fly ash notification. Unlike draft, in the final notification the onus of transportation has been put on the power plants rather than coal miners. The clause of taking permission from the ministry for road transport and the use of BS IV vehicle for road transport has been removed in the final notification.

CSE believes thermal power plants are already in non-compliance with new environment norms and implementation of flyash notification, the use of unwashed coal will make the situation worse, if such non-compliance continues. Thus, power plants should be held accountable to meet these norms immediately. Further, government should understand its own accountability in ensuring better quality coal to the plants; otherwise we will be left in the vicious circle of non-compliance and pollution.

The point wise comparison between the draft and final notification is given in the table below:

Highlight	Draft Notification	Final Notification 21th May, 2020	Remarks
Final agreement based on which decision has been taken	<p>And Whereas, the Ministry of Environment, Forest and Climate Change after deliberating the representations from Ministry of Power, Ministry of Coal, report of NITI Aayog and various stakeholders, arrived at the following:</p>	<p>And Whereas, the Ministry of Environment, Forest and Climate Change, after deliberating the representations from Ministry of Power, Ministry of Coal, report of NITI Aayog and various stakeholders and after careful considerations & in larger public interest, arrived at the following:</p>	<p>No specific change</p>
	<p>1. In the overall scheme of Coal, mine, washery and power plant, the extent of Ash content in mined coal remains the same. With washeries, the ash content gets divided at two places (washeries and the power plant), whereas in case of unwashed coal the ash content is handled at one place viz. the power plant.</p>	<p>1. The extent of ash content in mined coal remains the same. With washeries, the ash content gets divided at two places (washeries and the power plant), whereas if unwashed coal is used in power plant, the ash content is handled at only one place viz. the power plant</p>	<p>More detailing done in final notification</p>

	<p>2. The power plants are better equipped to address the Ash generated in terms of pollution control, waste management etc.</p>	<p>2. Thermal power plants are technologically equipped to address pollution control, ash management as they have high efficiency equipment to capture fly ash, dry ash evacuation and handling systems, ash supply systems for ash utilisation and tall stacks for wider dispersal of flue gases;</p>	<p>No change</p>
	<p>3. The Ministry of Environment, Forest & Climate Change has notified emission norms, mandating the respective power plants to adhere to such norms in a time bound manner.</p>	<p>3. The Ministry of Environment, Forest and Climate Change has notified emission norms, mandating respective thermal power plants to adhere to such norms in a time bound manner</p>	
	<p>4. The Ministry of Power has reported that the respective thermal power plants have already undertaken steps to put in place technology solutions so as to adhere to such norms;</p>		<p>Deleted in final notification. Many plants still need to comply with PM norms Plants which are PM compliant, the use of unwashed coal will increase PM emissions and these plants might need to invest in ESP</p>

			upgradation to remain compliant.
	<p>5. The Ministry of Power has also informed that those units that have either not initiated the process of putting in place technology solutions for adhering to emission norms or where such mechanism is not feasible, shall be phased out in due course. The Govt. has also announced this approach in the Union Budget 2020;</p>		Deleted in final notification. The Govt has announced to phase out the plants which are not adhering to emission norms or where putting new technology is not feasible due to vintage or economics of the plant. However, the identified units should be asked to provide a proper phase out plan and timelines for each unit.
Final decision	That power plants shall be allowed to utilize unwashed coal for the purposes of power generation irrespective of their location from coal mine and their generation capacity subject to the following	Use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to following conditions	No change

1. Setting Up Technology Solution for emission norms:	(i)	Power plants have either set up technology solutions to adhere to the prescribed emission norms and are meeting such norms or are in the process of setting up such technology solutions in compliance to the extant notifications and instructions of CPCB, issued from time to time	(i) Compliance of specified emission norms for Particulate Matter, as per extant notifications and instructions of Central Pollution Control Board, issued from time to time.	In the draft notification there is an assurance on the compliance level of the power plants wrt emission norms for all the pollutants, however, final notification mentions only about the compliance of PM norms to be ensured by the power plants.
	(ii)	In case of washeries, Middling/rejects to be utilized in CBC (Fluidized Bed Combustion) technology-based power plants. Washery to have linkage for 100% middling/rejects in FBC plants. Long distance (>100 km) of transportation of middling/rejects to be avoided.	(ii) In case of washeries, Middling and rejects to be utilized in FBC (Fluidised Bed Combustion) technology based thermal power plants. Washery to have linkage for middling and rejects in Fluidized Bed Combustion plants.	In the final notification the restriction to transport middling/reject to more than 100 kms has been removed. This will ensure the utilization of the middling/reject, even if no FBC plant is located in close proximity of washery (within 100 km).
2. Management of Ash Ponds:	(i)	Power plants shall not be entitled to any additional capacity of Fly Ash pond on grounds of switching from washed coal to unwashed coal.	(i) The thermal powers plants shall comply with conditions, as notified in the Fly Ash notification issued from time to time, without being entitled to additional capacity of fly ash pond (for existing power generation capacity) on ground of switching	No specific change

		from washed coal to unwashed coal.	
	(ii)	Powers plants shall be under obligation to utilize Fly Ash including Bottom Ash for different purposes as notified in the Fly Ash notification from time to time.	Broadly the point has been included in the fly ash notification and has been covered under Point 2 (i) of final notification. However clarity on what constitutes fly ash - the issue of bottom ash utilization is left unclear.
	(iii)	100% utilisation shall be achieved as per the timelines provided in the Flyash Notification and its amendments issued time to time. It is reiterated that Ash ponds are allowed only for emergency dumping not as regular disposal	Broadly the point has been included in the fly ash notification and has been covered under Point 2 (i) of final notification. The intent to push 100% utilisation and use of ash pond as emergency disposal sites is not written deliberately.

	<p>(iv) High concentration slurry disposal system shall be put in place to reduce water consumption ash slurry preparation. Ash Water Recycling System to be installed to recycle decanted water from the emergency ash pond for reuse.</p>	<p>(ii) Appropriate Technology solutions shall be applied to optimise water consumption for Ash management;</p>	<p>Plants have the option of selecting the appropriate technology.</p>
	<p>(v) Coarse ash from first pass of ESP to be stored in one silo and remaining ash to be stored in another silo to enable the cement industries/ash based industry to take flyash as per required sizes. This also enables to ensure the requirement of minimum blaine number of free silica.</p>	<p>(iii) The segregation of ash may be done at the Electro-Static Precipitator stage, if required, based on site specific conditions, to ensure maximum utilization of fly ash;</p>	<p>Plants have been given leeway to segregate and collect fly ash at the ESP itself to maximise utilisation .</p>
	<p>(vi) Around periphery of ash dyke, at least 20 m greenbelt is to be developed. Once the ash pond exhausts its capacity, filling up of 30 cm depth with good soil shall be done to raise greenbelt.</p>		<p>The requirement to reclaim a closed/filled fly ash pond has been removed. As per the expert (Mr. Ashu Gupta), it is not preferred to plant trees on ash dyke due to the possibility of ash dyke failure. However, the provision of 'filling up 30 cm depth of an exhausted ash pond' is mentioned in the changes in</p>

			conditions stipulated in the EC of TPP and coal mines Dated 28.8.2019.
(vii)	Ash pond surface shall be kept moist always. In case of dry bed, flexible water sprinklers to be provided for regular sprinkling of water in the dry season so that fly ash shall not become airborne.		A provision to control dust pollution from fly ash pond surface has been removed. As, the main objective is to utilize flyash in the dry form, hence this condition may not be applicable to all the plants.
(viii)	Use of bottom ash should be promoted in the construction industry and for this help of local regulatory authorities including district administration can be taken.		This point is plant specific and may not be applicable to all the plants. What needs to be done with bottom ash, the clarity has been removed
(ix)	MoEF&CC vide Office Memorandum dated 28th August, 2019 enabled all thermal power plants to dispose flyash in abandoned or working mines with environmental safeguards. If the mines are available within 50 km, the option flyash disposal in mine voids shall be explored to avoid degradation of fresh land for ash ponds.	(iv) Subject to 2(i) above, the thermal power plants to dispose flyash in abandoned or working mines (to be facilitated by mine owner) with environmental safeguards.	The provision of the disposal of the flyash in abandoned or working mines (to be facilitated by mine owner) with environmental safeguards has been introduced with no cap on the distance between the power plant and mines.

<p>3. Transport</p>	<p>i. Coal transportation shall be by rail only. In case of road transport, permission from Ministry as modification of existing Environmental Clearance may be obtained by providing justification of traffic sufficiency, non-availability of rail infrastructure, action plan and commitment to connect rail line to the plant premises, along with traffic impact assessment study). The proposals of transportation shall be placed before the Expert Appraisal Committee for making recommendations.</p>	<p>(i) Coal transportation may be undertaken by covered Railway wagon (railway wagons covered by tarpaulin or other means) and/or covered conveyer beyond the mine area. However, till such time enabling Rail transport/conveyor infrastructure is not available, road transportation may be undertaken in trucks, covered by tarpaulin or other means.</p>	<p>The need to transport coal only by train has been removed. Coal is allowed to be transported by road provided if rail infrastructure is unavailable. In the new notification the provision of taking permission from the Ministry in case of road transportation permission has not been mentioned. It is also directed to transport the coal from the mines in covered rail wagons, trucks or conveyors (by tarpaulin or other means)</p>
	<p>ii. For road transportation, covered trucks to be used. Other than trucks complying with latest Bharat Stage (BS) Emission Standards, no other trucks shall be used for coal transportation</p>		<p>The condition of trucks complying with latest Bharat Stage (BS) Emission Standards has been removed.</p>

	<p>iii. Unwashed coal shall be transported from coal mine to the point of loading at designated rail siding in closed container trucks by road, if transportation by rail, or conveyor facility or otherwise is not available which is subject to permission from the Ministry.</p>	<p>(ii) It shall be ensured by the thermal power plant that</p> <p>a. Rail siding facility or conveyor facility is set up at or near the power plant, for transportation by rail or conveyor; and</p> <p>b. If transportation by rail or conveyor facility is not available, ensure that the coal is transported out from the Delivery Point of the respective mine in covered trucks (by tarpaulin or other means), or any mechanized closed trucks by road.</p>	<p>The Ministry earlier had the power to refuse coal transport by road in case of excessive pollution as it needed special permission. In the new notification the provision of taking permission from the Ministry in case of road transportation permission has not been mentioned.</p>
	<p>iv. It shall be the responsibility of the coal mine owner to ensure 100% of such transport facility either (i) or (ii) above by 31' March, 2022. However, till 31" March, 2021, 40% of unwashed coal may be transported through tarpaulin covered truck facility.</p>		<p>The sole responsibility of ensuring the prescribed transport facility lies with the thermal power plant.</p>

4.	This shall also be deemed to be additional conditions of the relevant Environmental Clearances for respective projects for FY 2020-21 and onwards. The existing Environmental Clearances shall stand modified so as to make the above conditions operative for relevant sectors. The Consent to Operate shall be issued by respective SPCBs accordingly.	This shall also be deemed to be additional conditions of the relevant Environmental Clearances for respective projects for financial year 2020-21 and onwards. The existing Environmental Clearances shall stand modified so as to make the above conditions operative for relevant sectors. The Consent to Operate shall be issued by respective State Pollution Control Boards accordingly.”	No change
----	--	--	------------------

Note: All those points in draft notification on which CSE commented have been removed in the final one.