Manthan Adhyayan Kendra
मंथन अध्ययन केंद्र

18th June 2021

To,
Joint Secretary,
HSM Division,
Ministry of Environment, Forest and Climate Change,
Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi-110 003

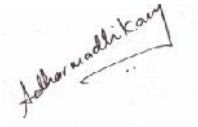
SENT BY: EMAIL to moefcc-coalash@gov.in

Subject: Comments on the Draft Notification On Fly Ash Utilisation of April 2021

Dear Sir / Madam,
Please find enclosed the comments and suggestions by Manthan Adhyayan Kendra, Pune on the Draft Notification on Flyash Utilisation published on 22 April 2021. Manthan Adhyayan Kendra is an organization researching and monitoring issues of water, environment and development.
We hope these comments will be considered and incorporated in the final Notification.

We request you to please send us acknowledgement of the receipt of these comments.

Sincerely,



Shripad Dharmadhikary, Coordinator, Manthan Adhyayan Kendra, Pune

Gat No. 571, Vithalwadi, Paud-Vithalwadi Road, Paud, District Pune, Maharashtra 412 108 Ph: +91-9552526472 Mail: manthan.shripad@gmail.com Web: www.manthan-india.org

Comments by Manthan Adhyayan Kendra, Pune on the Draft Notification on Flyash Utilisation Dated 22 April 2021

TABLE OF CONTENTS

Overarching Comments

Three comments

Clause Wise Comments

4. Add "water bodies and wetlands" to list of areas where ash dumping should be prevented
5. Delete "Filling of Low Lying Land" from allowed uses of fly ash
6. Committee to Recommend Eco-Friendly Way of Ash Use must include independent experts, representatives of ash-affected communities; eco-friendliness of proposed modes must be revisited and established
7. New Proposed Compliance Cycles Should Not Privilege Current Laggards: Alternative Suggestions for First Compliance Cycle
8. Treatment of Legacy Ash needs change in timeline, more safeguards and definition of 'stabilised' that evolves from a participatory method
9. Revise emergency ash pond area to be in line with the Flyash Notification 2009 and CEA report on land requirements for thermal power plants (2010); involve community in certification
10. Specify meaning of the phrase 'environmentally sound' as used in the draft; ensure compliance information is easily available in public domain
11. Add details of 'Form A' to text of notification
12. Delete clause stating statutory obligation of 100% utilisation is to be treated as a change in law
13. Review modalities of imposition of fine, explicitly clarify if unutilised ash will be added to next cycle, remove provision to return fine to TPP, add provision to shut down plant on repeated violations

Comments not necessarily corresponding to any specific clause

14. Plant expansion should be contingent on compliance with ash utilisation targets
15. Streamline the creation of committees, make them inclusive
16. Add provisions to ensure information generated by way of implementation of various clauses of the notification is freely accessible to public

Comments by Manthan Adhyayan Kendra, Pune on the Draft Notification on Flyash Utilisation Dated 22 April 2021

Manthan Adhyayan Kendra is a centre engaged in research, analysis and monitoring of the water and energy sectors. We give below our comments on the *Draft Notification on Fly Ash Utilisation of April 2021* (referred to as Draft Notification from here on). Our comments are divided into 3 sections. First, we give some overarching comments, followed by clause wise suggestions and then at the end give some suggestions which do not necessarily correspond to any specific clause in the Draft Notification.

Overarching Comments

1. The Draft Notification makes it explicit, in an unambiguous way that Thermal Power Plants (TPPs), the generators of flyash* are primarily responsible for ensuring its complete utilization. This is a very welcome step. The requirement making it mandatory for all TPPs to report the status of compliance regarding the same, which until now was not included in flyash management legislation, is also an important addition.
2. We would urge that the Draft Notification recognise three basic principles, articulate them and align its provisions to these principles.

    Principle 1: The most important way to manage fly ash in a safe manner and ensure its 100% utilisation is to first and foremost ensure as much reduction as possible in the quantity of fly ash generated. This is critical given the huge volumes of ash being generated every year.

    Principle 2: The fundamental objectives of the Draft Notification must be both, full utilisation of ash, and the prevention of any harm to the health of local communities as well as to the environment. This clarity is missing and the Draft Notification appears to prioritise full disposal without adequate considerations of the safety of health and environment.

    Principle 3: There is a fundamental difference between utilisation of ash and its disposal. The Draft Notification does not make this distinction and modes of disposal (e.g. filling of mine voids) are also presented as utilisation. This difference is important as the safeguards needed for disposal of ash are quite different and much higher than those needed where ash is really "utilised". Such safeguards for disposal are missing in the Draft Notification.

* Note: The term 'flyash' in this document, just as in the Draft Notification, has been used to mean both flyash, bottom ash and a combination of the two, to be taken as appropriate based on context.

3. Certain modes of utilisation have been given a renewed push, such as use of ash for shore protection measures and export of flyash. However, they have been listed without procedural or regulatory details. We believe the potential for such modes to be environmentally problematic is high, and therefore feel it necessary for proper regulatory and safeguards framework for the same to be included in this notification.

Clause Wise Comments

4. Add "water bodies and wetlands" to list of areas where ash dumping should be prevented

Relevant Clause: The Fourth "Whereas" in the Introductory Recital. This states:

"*And whereas, it is necessary to protect the environment and prevent the dumping and disposal of fly ash discharged from coal or lignite based thermal power plants on land;*".

Recommendation: To this statement we suggest the following should be added – "…*on land, wetlands, surface water bodies and other ecologically sensitive areas likely to be negatively affected by flyash dumping and pollution*."

Rationale: In many places, fly ash is being dumped or released into waterbodies like rivers (Kesla River / Dengur Nallah, Korba) or sensitive wetlands like mangroves (Ennore, T.N.) apart from dumping on land. It is important that such dumping in and on wetlands be prevented and this should be a part of the objectives.

5. Delete "Filling of Low Lying Land" from allowed uses of fly ash

Relevant Clause: Section A (2): This clause provides a list of "purposes" for which ash can be utilised.

Recommendation**:** The item "(v) filling of low lying area" should be deleted from this list.

Rationale: This provision directly contradicts the objectives articulated in the Fourth Whereas in the Introductory Recital, namely "*prevent the dumping and disposal of fly ash … on land*".

Further, the clause clearly states that ash must be used "only" for these purposes which should be "eco-friendly". The impacts of dumping ash on low-lying land are well-known, severe and include pollution of land, air (dust pollution) and water, with serious health impacts for local communities and flora/fauna. Thus, filling of low lying land is not an eco-friendly use of ash.

Filling of low lying areas is also often used as an excuse for irresponsible dumping of ash, and its inclusion will provide a very big loophole in the Notification and will allow ash dumping on land to continue unabated, with severe ecological consequences.

It may be argued that Clause 16 of this Draft Notification and the August 2019 OM of MoEFCC and CPCB Guidelines provide adequate protection to ensure that filling of low lying land with

ash will not cause ecological problems. However, these guidelines are inadequate in many ways, and experience has shown that in spite of such guidelines and permissions, filling of low lying areas with ash is hazardous both to ecology and human communities. The breach of ash dump on low lying land of the Sasan Thermal Power plant in Singrauli on 10 April 2020 where six people were killed in the subsequent ash flood is a stark reminder of the severe risks of dumping ash in low lying lands, even with all permissions and guidelines.

Lastly, we may note that the Expert Appraisal Committee of the MoEFCC itself had prohibited such disposal for many years for all these very reasons.

Thus, this mode of disposal of ash must not be permitted.

6. Committee to Recommend Eco-Friendly Way of Ash Use must include independent experts, representatives of ash-affected communities; eco-friendliness of permitted modes must be revisited and established

Relevant Clause: Clause (3) in Section (A) of the Draft Notification calls for the creation of a committee to "*examine and review and recommend the eco-friendly ways of utilisation of ash and make inclusion/ exclusion/modification in the list of such ways as mentioned in Para A(2) based on technological developments and requests received from stakeholders*."

Recommendation: We urge that the committee must include independent experts from the fields of ecology, environmental science, social impacts and human health and civil society groups working on ash related issues. Further, the committee must also include representatives of communities affected by fly ash disposal and use.

Environmental and health impact studies, site specific, case specific for bulk usage modes in current disposal / utilisation of ash, and long term impact studies of final end uses currently being practised including the modes permitted as per Clause A(2) need to be carried out and the results should guide whether a specific "use" would be permissible. This should be used to revisit and revise the list in A (2). This mandate can be added to the Committee proposed here in Section A (3) to be taken up on a priority basis.

Rationale: Most often the problems including ecological, social and health impacts of ash use and disposal have been exposed, highlighted and pursued by independent experts, civil society groups and local affected communities. It is thus imperative that they be included in this and such committees.

Apart from looking at the possible newer eco-friendly modes of ash utilisation, there is also a need to study post-facto whether current practices, and in particular several of the modes permitted in Clause A(2) are really eco-friendly and whether they should continue to be permissible modes of ash utilisation.

Typically, an eco-friendly practice is one that ensures least possible harm is done to the environment. Impacts of several modes permitted in A(2) for utilizing fly ash such as for mine

void filling, filling low lying areas and as soil conditioner in agriculture, are serious. Potential for the leaching of heavy metals from fly ash into surface and groundwater when ash is stored in 'low lying areas' or abandoned mine voids, is one example. This apprehension can be seen in the stand taken by the EAC itself in the past and we believe the same has not been resolved as yet. As such, there is need to re-visit and establish properly the rationale behind declaring these modes as eco –friendly. Studies based on which they are right now included as eco-friendly in Clause A(2) should be made public.

7. New Proposed Compliance Cycles Should Not Privilege Current Laggards: Alternative Suggestions for First Compliance Cycle

Relevant Clause: Clause (4) in Section (A) of the Draft Notification puts forward a three year cycle for all TPPs to achieve 100% utilisation of fly ash, mandating a minimum of 80% utilisation in any given year. However, for the first compliance cycle, the clause allows one additional year for those with 60-80% utilisation in the year 2021-22 and two years for those with utilisation less than 60%.

Recommendation: The three year cycle for all TPPs to achieve 100% annual average utilisation, with a minimum of 80% utilisation in any given year is a good target and we suggest that this provision should be maintained. However, we recommend that the duration of the first cycle is different than that suggested in the Draft Notification.

We urge that compliance with existing regulations should be the criteria in setting the duration for the first compliance cycle and not the level of ash utilisation achieved. Thus, all plants commissioned upto 2016-17 would have the first compliance cycle itself of three years as they anyway have to meet 100% ash utilisation target in 2020-21.

The plants commissioned during 2017-18, 2018-19 and 2019-20 would have the first compliance cycle corresponding to the number of years left before they are mandated to achieve 100% utilisation as per the current notification, that is, 1,2, and 3 years respectively. In other words, the first compliance cycle for these plants is merely the completion of their remaining cycle as per the current notification. However, the minimum annual targets for them would not be 80%, but the target corresponding to their year of operation as per the current notification.

For plants commissioned during 2017-18, 2018-19 and 2019-20, in case any condition in the Environment Clearance or any other statutory binding direction mandates 100% ash utilisation then these plants also will have their first compliance cycle itself of three years.

For plants to be commissioned during 2020-21 and subsequent years, the first cycle itself will be of three years. The second cycle for all power plants will be of three years. The table below summarises these recommendations.

Year of Commissioning of TPP / Particulars of TPP	First Compliance Cycle to Meet 100% Utilisation	Second Compliance Cycle to Meet 100% Target
2016-17 or earlier	3 years	3 years
2017-18	1 year*	3 years
2018-19	2 years*	3 years
2019-20	3 years*	3 years
2020-21 onwards	3 years	3 years
EC or any other binding direction mandates 100% utilisation	3 years	3 years

* These years are the years remaining in its cycle as per current notification. For purposes of calculating fines, shortfall will be measured for these TPPs with respect to the targets for the respective year as per current notification.

Lastly, in case a TPP is retiring / decommissioned in the middle of its compliance cycle, then it will have to ensure 100% utilisation of all ash by the end of the year of retirement.

Rationale: Allowing more time in the new proposed cycle to the TPPs who have not achieved adequate ash utilisation currently is actually privileging the laggards and violators; and is unfair to those who have met current targets. We suggest that compliance with existing regulations should be the criteria in setting the duration for the first compliance cycle as this is a fairer criterion.
Current regulations require all TPPs to achieve 100% ash utilisation four years from the date of commissioning. This means that plants commissioned up to year 2016-17 would anyway be required to meet 100% ash utilisation by the year 2020-21. Plants commissioned during 2017-18, 2018-19 and 2019-20 are required to have utilised 90%, 70% and 50% ash respectively by 2020-21.

8. Treatment of Legacy Ash needs change in timeline, more safeguards and definition of 'stabilised' that evolves from a participatory method

Relevant Clause: Clause (5) in Section (A) of the Draft Notification gives the definition of "Legacy Ash", and a timeline of 10 years for its full utilisation with intermediate targets, and

also provides exemption from utilisation of fly ash if the ash pond is certified as “stabilised” and “reclaimed”.

Recommendation: We strongly support the provision for ensuring 100% utilisation of all legacy ash.

However, we recommend that the number of years over which all legacy ash has be to utilised should be reduced to 7 years (seven years), with appropriate intermediate mandated utilisation targets.

Prior to any certification of any ash pond as stabilised and/or reclaimed, there is a need to evolve definitions and understanding of what this means. Such a definition should start with what are the objectives for “stabilising” and “reclaiming” ash ponds, and the primary objective must include making them risk free for the environment, ecology, local communities, cattle, flora-fauna. Thus, we suggest that a committee headed by CPCB should be set up to evolve such a definition and understanding of what these terms mean, and guidelines to achieve such stabilisation/ reclamation. This committee must necessarily have representatives of communities directly impacted by ash, independent experts, and representatives of civil society working on this issue.

Further, the process of certification that an ash pond has been stabilised and reclaimed must include the participation of communities directly impacted by ash, independent experts, representatives of civil society. That is, the determination and certification process will include all these above-mentioned groups.

Further, no ash pond that has been set up without a bottom lining, or where there are clear indications that the bottom lining if provided has been damaged, will be certified as stabilised. Ash from such an ash pond must be fully utilised.

In case a TPP is retiring / decommissioned before the period given for utilisation of its legacy ash, it will have to achieve 100% utilisation of the legacy ash before its retirement regardless of the timeline provided in this clause.

Lastly, much of the legacy ash represents gross violation of the mandatory and statutorily binding requirement of 100% utilisation provided for by the Fly Ash notification as issued and amended from time to time. Thus, we suggest a flat one-time environment-health-mitigation charge on each TPP on the total amount of its post-2009 legacy ash. A suitable rate can be fixed for this (say 100 Rs / ton of ash) and the amount collected must be used for immediate amelioration of the ecological and health impacts of the legacy ash. This is an interim, one time measure till the full utilisation of legacy ash is achieved, and this charge should be different than the fines proposed in the Section C. This is a charge to address in the short term the impacts of past violations; the fines proposed are for future violations of provisions of this Draft Notification.

Rationale: The intention to address the issue of legacy fly ash is very important and is a

welcome provision. We strongly support that this provision should be retained. However, some of its details need to be changed. As the legacy fly ash is responsible for many serious and adverse impacts on local communities like air, land and water pollution and health impacts, ten years is too long a time to address it. More important, the exemption provided from utilisation of legacy ash where the CPCB/SPCB certifies an ash pond as 'stabilised' and "reclaimed" is a very problematic loophole as the provision can be used to evade complete responsibility pertaining to unutilised ash that has accumulated over the years. Adding to this is the problem that there is no clear and acceptable definition of what "stabilisation" and "reclamation" of ash pond means, particularly so that such ash ponds are environmentally and health-wise safe. Research has shown that the effects of long-term contact of coal ash with water may take several years to be identified, and unutilised accumulated ash, even if "stabilised" via plantation/closing of ash pond areas, may continue to pollute groundwater, surface water and soil in the years to come.

9. Revise emergency ash pond area to be in line with the Flyash Notification 2009 and CEA report on land requirements for thermal power plants (2010); involve community in certification

Relevant Clause: Clause (6), Section A of the draft notification states that, "*Any new Thermal Power Plant may be permitted an emergency/temporary ash pond with an area of 0.1 hectare per MW*..."

Recommendation: The area of land allowed to be used for emergency/temporary ash ponds must vary depending on the type of coal being used (as opposed to the uniform 0.1 Ha per MW). Plants using indigenous coal should be allowed 0.1 Ha/MW for ash pond area, and those using imported coal should be allowed 0.02 Ha/MW. For plants using coal with ash content of 45% or more may be allowed 0.1 Ha/MW as well.

The annual certification of ash ponds on safety, environmental pollution etc. as provided for in this clause must involve independent experts, civil society representatives as well as members of the local communities.

Rationale: The area of land required for the storage of flyash is subject to many conditions. One of the main conditions is the type of coal used, as a plant using coal with higher ash content is likely to require more land for ash storage/disposal. If the ash content of coal used is lesser, the area permitted for emergency ash pond should also be lesser. The Flyash Notification 2009 states that the CEA and other authorities may permit land area for emergency ash pond up to 50 Hectares for a 500 MW unit, based on 45% ash content coal. Further, CEA's report *'Review of Land Requirements for Thermal Power Stations' (2010)* details the appropriate land to be allowed for ash ponds for TPPs with different capacities, but with distinctions based on type of coal used. According to the report, plants using indigenous coal should require 0.1 Ha/MW for ash pond area, and those using imported coal should require 0.02 Ha/MW. When seen with S.O 1561 (E), 2020, we believe clarity on permitted area for ash ponds corresponding to the ash content of coal is necessary.

Clause (6) of the draft notification also states that guidelines are to be issued by CPCB in consultation with the CEA for technical specifications of ash ponds/dykes, and a procedure for their annual certification based on its safety, environmental pollution, volume ash, mode of disposal, water consumption/conservation in disposal, ash water recycling and greenbelt etc. We believe this is an urgent requirement given the incidence of ash pond related accidents in the country and see this provision as a welcome step by the authorities. However, this certification needs to be credible, as well as include the knowledge of the local communities as they are very well acquainted with the state of the ash ponds.

10. Specify meaning of the phrase 'environmentally sound' as used in the draft; ensure compliance information is easily available in public domain

Relevant Clause: Clause (7), Section A states that all the steps pertaining to transport of ash is to be done in "*an environmentally sound manner."*

Recommendation: We recommend inclusion of the steps required to be undertaken by the plants in this regard to be specified in the notification. Further, status of compliance with the same should be easily accessible in the public domain.

Rationale: The phrase 'environmentally sound manner' written without explanation is ambiguous and has potential to act as a loophole for projects to avoid lesser polluting options of ash transport.

11. Add details of 'Form A' to text of notification

Relevant Clause: Clause (7) and (8), Section A mentions a Form A

Recommendation: 'Form A' must be included either as part of the main text of the notification or at the very least as a separate Annexure.

Rationale: The details of Form A are not provided in the text of the draft or as an annexure.

12. Delete clause stating statutory obligation of 100% utilisation is to be treated as a change in law

Relevant Clause: Clause (10), Section A states that, "*Statutory obligation of 100% utilisation of ash shall be treated as a change in law, wherever applicable.*"

Recommendation: Deletion of this clause in entirety. On the contrary, a clause should be added in Section C that fines imposed under this section should not be treated as change in law or be allowed to be passed on to consumers of electricity under any circumstances.

Rationale: The legal obligation for power plants to ensure 100% utilisation has existed since the introduction of the first Fly Ash Notification 1999, hence is not really a change in law, except for some details. Adding this clause in spite of this will lead to TPPs resorting to litigation with

electricity tariff regulatory authorities to allow pass through of such expenses to consumers. This is particularly problematic if this provision is used for passing on the fines mandated in Section C to consumers, as it will take away all the force of the fines.

13. Review modalities of imposition of fine, explicitly clarify unutilised ash will be added to next cycle, remove provision to return fine to TPP, add provision to shut down plant on repeated violations

Relevant Clause: Section C in the notification details the fines to be imposed and their modalities in case of non-utilisation of fly ash. Here we deal mainly with clause 26 and clause 22.

Recommendation: We recommend the following changes in the Section C and relevant clause, particularly clause 26.

Along with the provision that "The liability of ash utilisation shall be with TPPs even after imposition of fines on unutilised quantities", it should be added that "and such unutilised ash shall be added to the target for utilisation in the next cycle for the TPP, and failure to utilise the ash in the next cycle will lead to imposition of the fine once again on the quantity of ash unutilised." Thus, it should be clear that the fine will be imposed multiple times, once each for each cycle that that the ash remains unutilised.

Second, the provision "The fine collected by CPCB from the TPPs and other defaulters shall be used towards the safe disposal of the unutilised ash" should be deleted and replaced by "The fine collected by CPCB from the TPPs and other defaulters shall be used towards ameliorating and addressing the social and environmental impacts of the unutilised ash".

Third, the provision to return the fine should be deleted. Fines paid are for a violation, and should not be returned under any circumstances.

Fourth, it should be made clear that the amount of fine that is designated in the Notification (Rs 1000 per ton of ash not utilised) is the value in 2022-23 and in subsequent years the actual amount of fine will increase as per the inflation index or price index.

Fifth, in case a TPP continues to repeatedly default on its targets of utilisation for two consecutive cycles, then its operation should be shut down till the time it utilises the ash remaining unutilised. This is a necessary escalation of penalty. Similarly, if it defaults on its targets for legacy ash by more than two years, it should be shut down till the legacy ash utilisation target is met.

Sixth, clause 22 needs to be modified to state that "TPPs remain liable to dispose/utilise the legacy ash in spite of any fines paid for non-utilisation at any point of the period allowed for disposal of legacy ash, including at the end of the said period." (Notification says 10 years, we are suggesting 7 years). Further, the clause should provide another period of 2 years for utilisation of any such unutilised ash for which fines have been paid, and if the TPP fails to

utilise the ash in this additional period, then its operation should be shut down till the time it utilises the ash remaining unutilised.

In case of TPPs retiring / being decommissioned, they have to meet 100% utilisation of both ongoing ash generated as well legacy ash before they are retired/decommissioned.

Further, fine mechanisms for plants with increased capacity by way of addition of new units over the course of the 3 year cycle must be clarified.

Lastly, it needs to be clarified that the fine will be levied for any short fall related to the target specified, whether a plant is to meet 100% utilisation in a 3 year cycle or a 4/5 year cycle (as is proposed in Draft Notification for some TPPs for their first cycle or the slightly different first cycle that we have proposed).

Rationale: The provision to impose fines on the failure to meet ash utilisation targets is a welcome step. We are also in broad agreement with the modalities and provisions of all clauses in this section except Cl. 22 and 26, where we suggest some changes. We also feel that the rate at which fine is being levied can possibly provide a deterrent to the power plants and push them for compliance. At the same time, there are several provisions which show some internal contradictions, and some provisions which will clearly blunt any impact of the fines.

Clause 26 asserts that "The fine collected by CPCB from the TPPs and other defaulters shall be used towards the safe disposal of the unutilised ash.", but in the very next sentences also says that "The liability of ash utilisation shall be with TPPs even after imposition of fines on unutilised quantities." It is not clear how the liability is with the TPP if it is the CPCB who will now use the money given by the TPP to dispose the ash. If this is the case, the fine does not remain a penalty; rather it becomes a form of outsourcing of the ash disposal by the TPP to CPCB.

This outsourcing nature of the fine is further emphasised because there is no explicit provision that the unused ash for which a fine has been paid will have to be added to the target for utilisation for the next cycle, regardless of the fine. And that in case it is not utilised, it will be liable to be fined once again. Unless this is explicitly stated, the provision that "The liability of ash utilisation shall be with TPPs even after imposition of fines" may remain ambiguous and would be used as a loophole by the TPP to escape its responsibility to utilise that ash. This ambiguity also remains in the Notification in clause 22 with respect to legacy ash, where is it stated that for legacy ash that cannot be used even after 10 years, fines will be imposed. But it does not clarify what will happen to that ash after the imposition of fines, and that the TPP remains liable to dispose it. That the TPP has not been able to do so in 10 years (in addition to the years since the time the ash was generated) needs to be viewed seriously and needs an escalation in penalty. Similarly, repeated failure (over two cycles) to meet ash utilisation targets need to be viewed seriously and require an

escalation of penalty beyond fines.

Second, the proposal to return 90% of the fine paid back to the TPP in case it utilises the ash in the subsequent cycle (or 80%, 70% to be returned if use is in further cycles) is puzzling. First, in principle, a fine is to work as a deterrent for companies to avoid shirking responsibility with regards to these targets. By including the return of any amount of the fines imposed, this mechanism stands compromised. Secondly, and more importantly, we believe that the pollution and health burden due to the unutilised ash faced by communities living near ash dumping/disposal sites is irreversible. The return of a fine does not consider the damage caused by the unutilised ash in the interim period between the time when it should have been used and when it was actually used. Instead of being returned, the fines need to be used to address these impacts.

These issues arise with respect to the fines because of the wrong interpretation of the "polluter pays" principle. The preamble /recital to the Notification states that "Central Government intends to bring out a comprehensive framework for ash utilisation including system of fines/penalties based on polluter pays principle." The National Environment Policy 2006 defines the Polluter Pays principle as "making the perpetrator of the externality bear the cost (or benefit)…" In the case of non-utilisation of fly ash, the externality is the social and environmental impacts of the unutilised ash. Thus, polluter pays principle will require the perpetrator to pay the costs of ameliorating these; note that the costs of safe use or disposal of ash in the first place were always with the TPP, in fact, they are a part of the project operating costs. These cannot be termed as part of polluter pays. Thus, if the fines are based on "polluter pays" they should go towards those ameliorating social and environmental impacts of the ash, and should be *in addition* the cost of proper disposing of the ash as the latter always were the responsibility of the TPP as a part of its operating costs. Another role played by the fines is that of a deterrent, making non-compliance with ash disposal rules costly for the TPP. If the fines paid are to be used by CPCB to merely dispose off the ash, then it is actually taking over the responsibility of the TPP, and the fine itself will also not be seen as a penalty.

A recent report (April 2021) by The Forum of Regulators (forum of central and state electricity regulatory commissions) titled "Analysis of Factors Impacting Retail Tariff And Measures To Address Them" refers to this Draft (Fly Ash) Notification and notes that cost of fly ash transportation to take the fly ash to users around 300 kms will be about 15-23 paise per unit of electricity generated. It has indicated this figure as a proxy for the cost of ash utilisation. Our own calculations show that fines for TPPs on shortfall of about 50-60% in ash utilisation would be in a similar range. This indicates that TPPs would be happy to pay the fine and pass on the responsibility of the disposal of ash to CPCB. This can be prevented only if it is clear that the fine is not to go towards disposal of ash – the cost of that will still remain to be borne by the TPP as will its liability; that the fine is only for ameliorating the impacts of ash, and as a deterrent. And that the TPP will have to pay a fine once again on the same ash in case it fails to utilise it in the next cycle.

Comments not necessarily corresponding to any specific clause

14. Plant expansion should be contingent on compliance with ash utilisation targets

Recommendation: The following provisions should be added to the Draft Notification

(a) If the TPP has not met the targets for ash utilisation – either for any specific year or for the entire cycle or for its legacy ash – then it should not be allowed to go ahead with capacity expansion. If the application for environmental clearance for expansion is under process the same should be put on hold till ash utilisation targets are met. If EC has already been obtained for the expansion, and / or construction is underway or completed, the unit should not be commissioned. In particular the Consent to Operate must not be granted until the ash utilisation targets of regular and legacy ash for the year are met.
(b) Retrospective amendments in the Environmental Clearance (EC) conditions of thermal power plants reflecting the above must be introduced (similar to what has been ordered by MoEFCC in the case of ECs of TPPs and coal mines potentially utilising ash via filling of mine voids vide OM dated 28 August 2019).

Rationale: Plant expansion via addition of new units is likely to increase ash generation. If the plant is not able to meet its existing statutory requirement of the quantity of ash to be utilised, it is clear that it will not be in a position to use the additional ash. This will lead to increasing the land requirement of a power plant for ash disposal, and also increase impact on local communities. Thus, unless existing units meet ash utilisation targets (both regular and legacy ash), we recommend newer ones must not be allowed to be operationalised.

15. Streamline the creation of committees, make them inclusive

Recommendation: Add independent experts, civil society groups working on fly ash issues, and members from communities affected by flyash pollution to the committees being proposed under various clauses: for recommending of eco - friendly modes of ash utilisation, for identification of mines for backfilling with ash/ash mixed with overburden, and for monitoring the implementation of the notification. Further, combine the committee being proposed for examining, reviewing and suggesting new eco-friendly modes of ash utilisation with the committee for monitoring the compliance of provisions of the notification.

Rationale: The draft suggests the creation of multiple committees for different purposes. Decisions regarding flyash utilization are likely to benefit from the voices of those most severely affected by fly ash – the draft does not seem to consider this in any way or form. Similarly, the committees also need to have members from civil society groups working on fly ash issues and independent experts as these have been the people responsible for

highlighting most of the impacts, violations, non-compliance in many cases. Legislation attempting to tackle the unrelenting issue of flyash management in India must ensure more inclusiveness, transparency and public participation than it does at the moment. Further, three committees (out of four in total) to be created by way of this draft notification have some members common to them, namely, chairman from Central Pollution Control Board, representatives from Ministry of Environment, Forest & Climate Change, Ministry of Power, Ministry of Mines, Ministry of Coal, Ministry of Road Transport. We recommend the combining of these to streamline efforts of implementation and monitoring of the new notification going forward.

16. **Add provisions to ensure information generated by way of implementation of various clauses of the notification is accessible by the public**

Recommendation: Information including but not limited to the provisions of the following clauses must be made easily available to the public (in suitable formats in line with latest information technology) - Clauses (3), (5), (6), (7), (8), (15), (17), (21), (26), (29), (31), (32) and (33). This includes minutes of meetings and reports of various committees, figures reported by TPPs, information collected by SPCB/CPCB for certification, other information collected etc. Add separate provisions ensuring that information is to be made easily available to the public (by plant owners and relevant government authorities alike) as part of the notification.

Rationale: The draft notification introduces requirements for different information to be provided by TPPs as well as by newly formed committees. However, there is no explicit mention of ensuring the same is available in the public domain. We believe this is a provision that must be added to increase transparency and ensure accountability of defaulters. Easily accessible information (such as the meeting minutes of committees discussing introduction of new modes, the certification to be provided by SPCBs for technical ash pond design, etc.) is necessary to strengthen this notification.

Comments Prepared By

Sehr Raheja, Shripad Dharmadhikary, Ashish Sinha (with inputs from Avli Verma)
Manthan Adhyayan Kendra, Pune.

www.manthan-india.org

Contact: manthan.shripad@gmail.com

18 June 2021