

From The Chief Engineer,
Panchayati Raj Public Works, Haryana,
Chandigarh.

To All the Superintending Engineers,
Panchayati Raj Public Works,
in the state of Haryana.

Memo No. PRC/15/ 1101

Dated: 26/2/15

Subject: Liquid Waste Management in rural area.

Ref:- In continuation of this office memo no. PRC/15/603-606 dated 02.02.2015

In continuation of guidelines circulated vide letter under reference, a meeting was taken by undersigned at each revenue division head quarter in which all concerned Superintending Engineers, Executive Engineers, Sub Divisional Officers and Junior Engineers participated. In some of the meetings, it was also discussed that in first pond (Anaerobic Pond) of "Sludge Stabilization Ponds System", cleaning/disilting will be required more frequently in comparision to other ponds of the system. Therefore, provision of "Alternate Anaerobic Pond" should also be made so that waste water may be diverted to this Alternative Anaerobic Pond during cleaning/disilting of Anaerobic Pond. Thus, there will be 5 ponds in this "Sludge Stabilization Ponds System" namely - (i) Anaerobic Pond (ii) Alternate Anaerobic Pond (iii) Facultative Pond (iv) Maturation Pond and (v) 2nd Maturation Pond.

2. It was also emphasized in these meetings that size of four ponds from (i) to (iv) above, should strictly be kept in accordance with actual discharge/quantity of waste water discharging into these ponds. Size of the pond at Sr. No. (v) will be bigger in comparision to another four ponds. Infact, area of the 5th pond should be kept as large as possible depending upon the area of available land/existing pond. An illustrative example of design is enclosed as Annexure "A" for ready reference.
3. In case, depth of the existing pond is more than the required (i.e. more than 10' or 5') inlet/outlet pipes should be provided 10'/5' (as the case may be) above bed level of pond to ensure requisite liquid depth. The portion of the pond left above inlet/outlet pipes, will be treated as Free Board (F.B.).
4. As already communicated, the minimum side slope of the embankment should be kept as 1:1.5.
5. It should be strictly ensured that earth work should be laid in layers and proper rolling/ compaction should also be ensured at any cost. Strict disciplinary action should immediately be initiated against the officer/official concerned, in case of violation of these instructions. Over all success and sustainability of the ponds

system will depend upon strict adherence of all these design parameter as well as implementation procedure.

6. During these meetings, it was also decided that provision of Operation and Maintenance cost (O & M cost) for a minimum period of 3 years, should also be made in the project cost.

7. It was discussed at length and was concluded in these meetings that revision of estimates w.r.t. Liquid Waste Management Project already sanctioned for the current financial year 2014-15, will be required in view of the following :-

(i) Existing pond is in the abadi area and provision of Stabilization Ponds System in this existing pond has been taken in the estimate whereas there is possibility of shifting this pond outside abadi area. Thus, provision of (a) additional drain/nala (or pump, wherever gravity flow is not possible) and (b) excavation of new pond alongwith "Sludge Stabilization Pond System", is required to be made.

(ii) Existing pond is inside abadi area but cannot be shifted outside abadi area. Provision of "Sludge Stabilization Ponds System" has been taken into original estimate whereas this ponds system cannot be provided in such ponds (i.e. in those existing ponds which are situated in abadi area and cannot be shifted outside abadi area). Therefore, provision for cost of construction of alternative Treatment System (to be finalized at the head quarter level as already communicated) has to be provided instead of "Sludge Stabilization Ponds System". In such cases, construction work of other components (i.e. drainage network, Soakage Pit, Leach Pit, Kitchen Garden etc.) of the approved estimate be taken up at once and information be sent to the quarter concerned that revised estimate will be submitted later on after finalization of the technology for alternative Treatment System.

(iii) Provision of remodeling of one or two existing ponds has been taken into the estimate whereas there are more existing ponds in that particular village and remodeling of those additional ponds is also required and thus, estimate need revision.

(iv) Provision of making three ponds have been taken into the estimate whereas provision of five ponds is required to be made, as explained above in detail. Similarly, sizes of the ponds will be required to be modified as detailed above.

(v) Provision of installation of pump (alongwith settling chamber) into 2nd maturation pond is required to be made in the already sanctioned estimate so

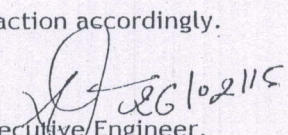
as to ensure reuse in agriculture/horticulture, whenever required (may be managed by the village level committee on cost basis or otherwise for sustainability) or draining out to nearby drain in rainy season/flood, wherever required or other such re-uses.

- (vi) Additional provision for drains, nalas, soakage pits, leach pits, kitchen gardening is required.
- (vii) Provision of beautification of "Sludge Stabilization Ponds System" (i.e. Plantation, Grass, Barbed wire fencing, Improvement of geometrics i.e. size and shape of the existing pond) has not been made into the original estimate and thus needs revision.

8. In view of the requisite revision of the estimates as explained above, all concerned were directed to prepare and submit the revised estimate immediately (within week time). Accordingly, these revised estimates were required to be submitted by 20th February, 2015 to the quarter concerned but the estimates have not been received at head quarter till date. Telephonic message have already been communicated to all concerned for submitting the same at head quarter by 28th February, 2015. This timeline should strictly be adhered to. Kindly ensure submission of revised estimate by 28.02.2015 because financial year is going to be closed very shortly and govt. is pressing very hard for timely implimentation and completion of these projects.
9. Needless to say that starting of the work should not be delayed on account of revision of estimates. As explained above, other component of the already approved estimate which do not require revision (ie. Drainage network upto pond, soakage pit, leach pit, kitchen garden extra) should immediately be got started.

These instructions may please be brought out into the knowledge of all concerned for strict compliance and ensuring timely action accordingly.

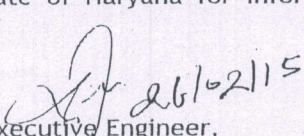
Encl. As above.


Executive Engineer,
for Chief Engineer,
Panchayati Raj Public Works, Haryana,
Chandigarh.

Endst. No. PRC/15/ 1102

Dated: 26/2/15

A copy of the above along with enclosures is forwarded to all Executive Engineers, Panchayati Raj Public Works in the state of Haryana for information and necessary compliance accordingly.


Executive Engineer,
for Chief Engineer,
Panchayati Raj Public Works, Haryana,
Chandigarh.