

Community appraisal
on the proposal to discharge of treated effluent from
Narora STP to Talwar Rajwaha

A report on –
joint visit of SSU & HSS : Sept. 21-23, 2019

Submitted to –
The Project Director,
State Mission for Clean Ganga (SMCG),
Department of Urban Development,
Government of Uttar Pradesh

Executive summary

1. The World Bank assisted Narora sewer project could not be operationalized for over a year due to technical snags such as inappropriate location of the sewerage treatment plant (STP) and community's resistance to discharge of treated effluent into river Ganga, as proposed in the original project plan.
2. Uttar Pradesh Jal Nigam (UPJN) the state appointed implementing agency, considered alternative site for discharge of the treated effluent into the lower Ganga canal, which toes the natural slope along the river Ganga; was not permitted by Irrigation Department of Government of Uttar Pradesh. The UPJN subsequently proposed a second alternative site. The site is at a settlement namely Retagarh of Gram Panchayat Rupaspur, the treated effluent proposed to be discharged into an approx. 100-year-old Rajwaha (minor canal), namely Talwar Rajwaha.
3. A World Bank team visited the Retagah site on Sept. 7th 2019 to review and make an assessment of the above alternative site. As per the reports of SMCG and UPJN, some elements from the local community registered their displeasure about the decision of discharge of treated effluent into the Rajwaha at a site close to their settlement. The exact deliberation or the observations made by these elements could not be appraised to the joint team of State Support Unit (SSU) and Harijan Sevak Sangh (HSS) that was designated by the State Mission of Clean Ganga (SMCG) to examine the case and suggest resolution to the matter.
4. The joint team adopted a method of physically appraise each of the reported sites, speak to all concerned and especially engage with the communities of Retagarh and others that could raise concern on discharge of treated effluent in to locations close to their settlements. It trekked through the Rajwaha and all the sites in question – alternative sites also. It observed that the deliberations so far with the communities lacked pertinent information and sensitizing concerned audiences about the proposal of discharging treated effluent into the Rajwaha.
5. The joint team after extensive and candid engagement with the community of Retagarh concludes that simply altering the site of discharge of the treated effluent from upstream of the settlement to downstream would resolve the issue. However, the while implementing the recommended alternative, SMCG should direct the UPJN to ensure a range of allied measures as pointed out in paragraphs 6, page 5.

Conclusive observation and recommendations

1. The core of the communities' reservation along discharging the treated effluent into the Talwar Rajwaha may be addressed simply by altering the from the proposed site 600 meters up stream to 500-750 meters upstream. The Rajwaha passes through the settlement and indeed does not carry water for a long time. As per the community, the nearly 100 years old Rajwaha rarely operate; has lost its water carrying capacity in most of its stretches.
2. The following depiction suggests the change in site of discharge of treated effluent (from site 1 to site 2). The map below also depicts the proposed pipelines to carry the discharge to Retagarh settlement until the *Narora-Anupshahar* road. The trek across the road towards Retagarh is likely to alter with change of site of discharge.



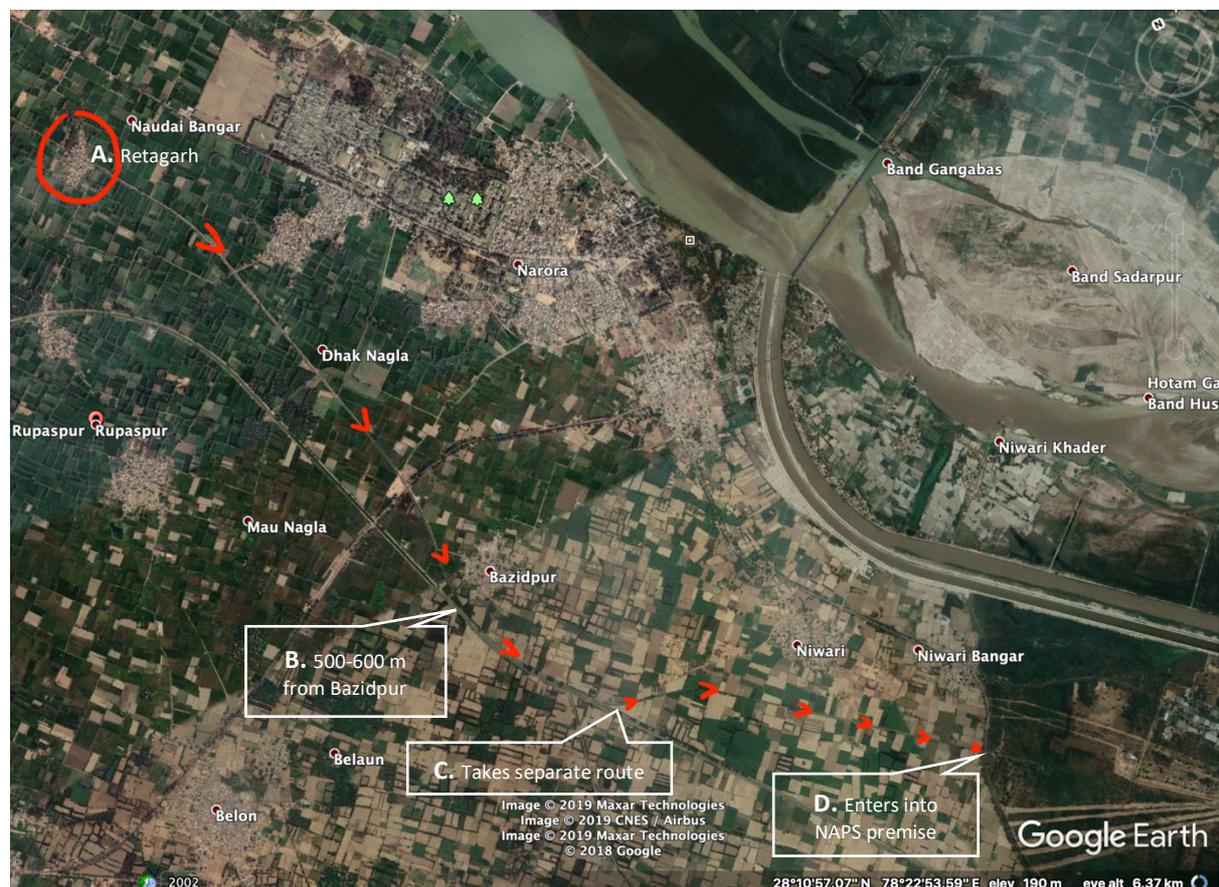
3. The track where the pipelines are proposed to carry the discharge; as has been marked in the above map, are indisputable. However, the contour of the track is undulating and UPJN would certainly consider arrangements to take the treated effluent to the height that it seeks to carry to the point of discharge.

About Talwar Rajwaha

4. The Rajwaha does not operate except in rare occasions – the villagers suggest 2 to 3 days in a year; not regularly though. The following map depicts the Rajwaha for approx. 7.5 kms; a brief account has been mentioned in the table below.

Location	Geo-point	Particulars
A. Retagarh	28° 12' 41.45" N/ 78° 21' 39.25" E	The settlement where discharge of treated effluent has been proposed by UPJN; an alteration in site has been recommended by the joint team. As observed and field validated by the joint team, there is no other settlement through which the Rajwaha passes till point D where the Rajwaha is seen to be entering into the premise of NAPS.
B. Bazidpur	28° 10' 56.30" N/ 78° 22' 09.13" E	The settlement is some 3.2 kms from Retagarh along the Rajwaha and is located at a distance of approx. 250 mts from the Rajwaha. This is a point where the Rajwaha seem to be converging with the Upper Ganga canal; indeed, it doesn't.
Points B. to C.	28° 10' 24.43" N/ 78° 22' 28.59" E	The Rajwaha between these 2 points flow parallel to Upper Ganga Canal; nowhere connects/ meets. At point C the Rajwaha moves away from Upper Ganga Canal
D. Adjacent road - NAPS	28° 9' 44.89" N/ 78° 23' 37.06" E	Point D, approx. 7.2 to 7.5 kms from Retagarh is end of the Rajwaha as it enters into the premise of NAPS. The NAPS

5. The following image of google earth shows the 4 distinct points along the Rajwaha.



6. Before operationalizing the alternative considered for discharging the treated effluent into the Rajwaha, the following points may be keenly examined and remedial measures undertaken, as deemed necessary –

Findings/ Observations	Recommendations
<ul style="list-style-type: none"> ▪ Nearly 100 years old, The Rajwaha is rarely operational. The water carrying capacity and flow in the direction being considered, is questionable in most its stretches. There could be breakage and/ or some portions vandalized by local elements to flow water to their fields. The joint team found spots where the Rajwaha has been blocked and is being used to reverse-flow water from the adjacent upper Ganga canal. 	<ul style="list-style-type: none"> ▪ Cleaning of the Rajwaha is absolutely necessary, at least for the stretch that is being technically required. Perhaps the whole of 7.5 kms from Retagarh to the boundary of NAPS premise must be cleaned up, repaired wherever required. The direction of the flow along the gradient of the Rajwaha must be examined carefully.
<ul style="list-style-type: none"> ▪ The Retagarh is the only settlement along the 7.5 kms of downstream of the Rajwaha up till the NAPS boundary; end of the Rajwaha. 	<ul style="list-style-type: none"> ▪ A measure must be considered to prevent any possible reverse flow of the treated effluent into the settlement anytime in future. Examine all allied considerations.
<ul style="list-style-type: none"> ▪ Besides Retagarh, the other two settlements in proximity of the Rajwaha are – <ul style="list-style-type: none"> (a) Dhak Nangla, and (b) Bazidpur. Both are located on one side of the Rajwaha; at some distance – hence, not directly affected by any possible seepage from the Rajwaha. <p>The settlement of Dhak nangla would be part of Narora Sewer project as it is included in the ULB. Not fully informed, the community may have some reservation when viewed in the backdrop of UPJN work so far and the lapses visible on the ground.</p> 	<ul style="list-style-type: none"> ▪ Measures such as linings along the sides of the Rajwaha may be considered, especially in stretches where the community perceives any possible leakages etc. seeks to be prevented. ▪ The settlements on both sides are connected by several <i>chakroads</i>. The project must consider any possibility of additional culverts, without which chances of breakage of the Rajwaha could persist. ▪ Bazidpur is a special case. Intensive cultivation all along the year, the project must examine special needs of the settlement, if any.

7. The joint team observed that due care should be taken in examining the Rajwaha carry the treated effluent all though and must not accumulate at any specific points. Given the experience with many STPs operated by UPJN, the Narora STP must assume high degree of caution to not discharge untreated effluent.

Discussions with the community

8. The community is uninformed about the proposals and the consultation proceedings. They only have observed vehicles coming into the settlement in herds. In all cases; those visited the settlement neither introduced themselves nor identified the residents that are being interfaced. The atmosphere; if anything from the perspective of the villagers, may be attributed as suspicious, as the community appraised. The joint team not only introduced the identity of the team & its members, left names and phone numbers of the members with the community for them to get in touch if feel necessary.



9. Three significant sessions of discussions were held with the community, duly informing them the details of the proposal of discharging treated effluent into the Rajwaha and any possible fallout. Women were engaged by the female members of the team, separately, to take them into confidence and share any concern that they have. Young people, who proved to be rather liberal audience, indeed triggered the bargains along developing the Rajwaha and parts of the village if possible. These were allowed to argue their points to other villagers.



10. The team found that most of the concerns of the community is centered around lack of information and the inadequate methods in building community consensus. The women that started with steep opposition to the proposal, began to reconcile as the technical issues were explained to them in lucid terms and with examples. Here, the joint team's experience of working with the sewer projects and being able to lay down the future scenario, helped.



11. The time available to the joint team was inadequate and on the build-up of a rather incomplete exercises conducted by UPJN thus far. The community perceptions mellowed significantly by accessing justifications and answers from the joint team of the concerns they raised. The concerns reported to the joint team were largely based on their observations thus far of the way interface was attempted. In all likelihood, there would be newer questions as the community is exposed to (a) the construction phase of the proposed lines, and (b) operationalization thereafter. The SMCG must deliberate upon a proactive gesture to address such concerns of the community of Retagarh and answer embedded questions.

12. The final interactions : On the evening of Sept. 22nd 2019, a discussion session was conducted to engage with the core citizens; a mix of few that opposed the proposal and those submitting rationale arguments from within the same community. The session was

provided not only with the experiences of sewer projects all across the state as a new experience, but also about plausible options that could aid River Ganga to remain clean and unpolluted. Technical aspects were explained and also the contributions of people that matter in realizing the efforts of the state.



13. The HSS team collated the opinions of the villagers on the morning of Sept. 23rd to finally arrive at a conclusion. The final opinion of the community converged at the solution that this report argued at the start of changing the point of discharge from upstream to downstream of the Rajwaha. The villagers attribute the proposal of discharging the treated effluent at a spot upstream of the Rajwaha was unthoughtful and duly aligned with a changed site in the downstream. The villagers along with the HSS team identified a spot 500-600 meters downstream the Rajwaha at a site of a *Kulawa*, which in later course may be considered by UPJN if found technically suitable.

14. Recommendations : The SMCG must contemplate a process of information dissemination while the project (of constructing the discharge line) goes underway. The joint team feels; given the poor work UPJN has done so far in sewer network in Narora and earned poor reputation - - easily learnt by the Retagarh community, the construction phase of the project seeks assistance of responsive social sensitization and counseling.

- 15.** The exercises conducted so far along social and environmental assessments and community facilitation, demands delineation of working protocols and issuance of guidelines; strict adherence of the same. The SMCG may contemplate basic guidelines in this direction duly drawing performance-evidences to be reported by the UPJN or any other entity assigned to conduct the same.

- 16.** The SMCG may consider an accountability framework for any violation of environment norms while operations of the discharge of the treated effluent from the Narora STP takes off.

Narora visit of a joint team of the State Support Unit (SSU) and Harijan Sevak Sangh (HSS) :

Briefing note for APD, SMCG

I. Existing status as reported -

- Operationally, the STP is ready for a year but registers zero inflow; meaning existing house connections are not flowing to the STP;
- Total no. of estimated HSC is approx.. 5,565; some 2,500 HSCs are claimed to be provided by UPJN;
- As reported by UPJN, the HSCs connected already with houses are discharged untreated into some nallahs.
- The key point that is impeding operationality of the STP is where to discharge the treated sewer – as the 3 plausible points identified as alternative to one another;
- The community at all points of possible discharge of treated sewer are opposing the proposal; these are – as delineated as alternative to each of the previous one;
 - Proposed STP discharge into the river; or
 - Ganga canal; or
 - Rajwahas – tailing into farm lands – leading through Anupshahar minor canals;
- Communities in settlements of all these points of discharge of treated sewer seeks deeper assessment;
- Communities' perception on drains carrying sewer into the river has not been examined;

II. Fact finding – proposing clear solutions and an action-plan to achieve the project objectives

- Objective of the visit of the team is to investigate the social angle to the problem and suggest solutions; measures and methods thereof to be adopted. Also, validate the problems reported and observe any additional findings along implementation and status of the sewer house connection project;
- Submit an analysis of community/ social perception; extent of opposition and measures that need to be taken; suggest timelines thereof; submit proposal for CSO engagement etc. as per existing terms.

III. - - to-do list

Part – 1 : Examining community/ social perception around discharge of treated water of the STP into –

- a) The river as envisaged in the original DPR/ consider visiting and speaking to community that resides around the point of discharge;
- b) Possibility of discharge of treated water into Ganga canal/ Rajwahas leading to Anupshahar minors;
- c) Engage with the community in general to learn about the sewer house connections/ quality change that it is potential to bring about _ assess community awareness/ demand for specific IEC, if any;

Part – 2 : Examining physical locations of drains that are carrying sewer into the river; sewers that are being discharged untreated from the existing 2,500 odd HSCs and most importantly, examining all possible points where discharge of treated sewer is viable.

Part – 3 : Make an assessment of : Status of the sewer network project; house connections that are provided with and those not yet provided – seek all pertinent information.

Information/ documents needed –

- Sewer map;
- List of HSCs;
- Map of the Nallahs where untreated sewer is flowing from existing HSCs;
- Any other document that might be relevant to the team;