

The Times of India- 29- October-2022

Use of chemical boosted dissolved oxygen, reduced pollution: Official

Kushagra Dixit
& Siddhanta Mishra | TNN

New Delhi: Politics over Chhath Puja and the polluted Yamuna apart, officials carrying out the spraying of an anti-surfactant on the foam in the Yamuna – which has been the picture postcard of Chhath that the Capital sends out annually – have vouched for the chemical's safety and efficacy.

Sanjay Sharma, director of Delhi Jal Board's quality control wing, was on Friday overseeing the froth control work being undertaken at Kalindi Kunj as recommended by the special committee of National Mission for Clean Ganga (NMCG).

Largely due to untreated waste and effluent from detergent factories entering the river, and in the absence of dissolved oxygen, swathes of froth form on the Yamuna. Officials revealed that the de-foamer being sprayed at Kalindi Kunj was polyoxypropylene, which has been declared to be safe by the United States Food and Drug Administration.

Defending the exercise, Sharma, who is seen in the viral video of his spat with Parvish Verma, claimed that an on-site fish toxicity test and fish bioassay had been carried out to be "doubly sure".

Another DJB official added, "This de-foamer is used worldwide and is completely safe. In fact, it was recommended by NMCG. In tests, fish from the river remained unaffected. In fact, we found the dissolved oxygen level rose and pollution dropped." According to the fish bioassay, a report of which is with TOI, eight local Yamuna rohu and puthi fish were kept in 20 litres of defoaming chemical diluted 100 times for two to 12 hours without coming to any harm.

The officials pointed out that the de-foaming agent,

NO MORE FOAMING?

Why frothing

Due to phosphates and turbulence in water

Due to anaerobic bacteria when dissolved oxygen (DO) drops below 2mg/l

Barrage at Kalindi Kunj ghat creates turbulence

De-foamer in use

> A chemical of polyoxypropylene group that dissolves the froth

> Raw emulsion is diluted 100 times before spraying on froth

> Officials claim improvement in DO, biochemical oxygen demand (BOD) and chemical oxygen demand (COD)

> Claimed to have no impact on fish



Photos: Anindya Chattopadhyay

Improved parameters claimed

DO (mg/l)
■ Oct 15 3.95
■ Oct 28 8.1

BOD (mg/l)
■ Oct 15 30
■ Oct 28 13

Condition of river in September 2022

Station	DO (min 5 mg/l)	BOD (max 4 mg/l)	Fecal Coliform (max 2500, desired 500 MPN/100ml)
Palla (In)	5	2	1,000
Azgarpur (Out)	Nil	50	6,00,000

procured through a Coimbatore organisation, was proving good for the river's health. "The chemical was tested in DJB's laboratory for a month where it was discovered to be raising the dissolved oxygen level. The compound has been approved by FDA for use in waterbodies and effluent treatment plants to reduce froth," said Sharma.

A DJB official explained that "there could be two major reasons why foam is formed on the river. One, of course, because there are so many

open drains discharging sewage into the river. The second is that the barrage at Kalindi Kunj has a big difference in water level that results in water flowing downstream causing turbulence. Were the water to be released from the barrage smoothly, froth formation would be minimised."

According to the officials, the first trial of the anti-surfactant spray was conducted on October 24. Since then, the dissolved oxygen level has increased on that stretch of the Yamuna. Spraying will conti-

nue there between 8am and 8pm for a few more days in an effort to prevent froth.

However, river activist Manoj Mishra, pointed out in a tweet that the use of man-made polymers couldn't be deemed eco-friendly. "Not contesting the intention though, why only now is a valid query; it can be asked how use of a man-made polymer 'silicone' with known toxic effects is dubbed eco-friendly," tweeted Mishra.

DJB officials explained, however, that the chemical had been diluted to a very safe

level. Unlike every year, perhaps this year devotees who gather in large numbers on the Yamuna bank for Chhath Puja may not have to grapple as much with froth.

It was last November that that chief minister Arvind Kejriwal had announced a six-point action plan to clean the Yamuna and said he would himself take a dip in the river before the next Assembly elections, in effect fulfilling a promise made by his party in 2020. But that's easier said than done.

Hindustan Times- 29- October-2022

Politics heats up as Oppn targets govt over spray to clean Yamuna

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NEW DELHI: With the city preparing to celebrate Chhath Puja, the toxic foam in the Yamuna -- an annual affair during this time of the year -- has kicked off a political row with the Bharatiya Janata Party (BJP) and the Congress alleging that the government was using a 'poisonous' spray to remove froth and the ruling Aam Aadmi Party (AAP) rejecting the charge as politically motivated.

In a video shared widely on social media, BJP MP from West Delhi Pravesh Sahib Singh Verma was seen on Friday shouting at a Delhi Jal Board official during a visit to a Chhath ghat.

In the video, Verma is seen asking the official if the anti-frothing chemical be poured on him. The MP later said that he found containers of poisonous chemicals during his visit to the ghat. "I repeatedly asked them to not put chemicals into the Yamuna. How can I not be angered if officials don't listen to me? If I have to talk on this manner for the benefit of the people of Delhi, then I have no



Delhi Jal Board officials spray chemicals into the Yamuna to dissolve the toxic foam. SANJEEV VERMA/HT

problem," Verma said.

The AAP hit back saying even as the Delhi government was preparing for the Chhath Puja, BJP leaders are hampering work and misbehaving with the officials. "The local Poorvanchali people took the BJP politicians to task

BJP does not do anything while its leaders are threatening the Delhi government officials," AAP MLA and party's spokesperson Saurabh Bharadwaj tweeted.

Meanwhile, Delhi Congress chief Anil Chauchary filed a police complaint against Delhi Jal Board

(DJB) officials for allegedly sprinkling "toxic chemicals" in the Yamuna.

Chaudhary said, "We have filed a complaint regarding spraying of poisonous chemicals in the Yamuna waters by the Delhi government officials to hide the

ammonia-phosphorus foam, which will further add toxicity to the already heavily polluted river, and pose severe health problems to the devotees who will perform Chhath Puja at the Yamuna ghats on October 30 and 31."

The DJB, however, clarified that the agency was using a silicon dioxide-based agent with polyoxypropylene group as the de-foaming agent, and added that it is not harmful. "Silicon dioxide is derived from silica or sand. It is used in shampoos, conditioners and even some medicines. Some videos of doctors talking about its toxicity are being seen on social media, but we need to understand that these compounds need to be spoken about in the context of the right concentration and dosage. The mixture is being used with 100 times dilution and there is visible improvement in the water quality," a Jal Board official said, asking not to be named.

Foam or froth formation is a phenomenon that occurs on many lakes and streams. Foam bubbles are produced when organic matter decomposes and releases surfactants or surface-active agents.

Jansatta- 29- October-2022

‘रसायन डाल कर यमुना को साफ करना कोई स्थायी हल नहीं’

जनसत्ता संवाददाता
देहरादून 28 अक्टूबर

आइआइटी रुड़की के जल विज्ञान विभाग के वैज्ञानिकों का कहना है कि दिल्ली में यमुना नदी के जल में कोई रसायन मिला कर साफ करना कोई स्थायी समाधान नहीं है बल्कि किसी केमिकल को मिला कर हम नदी के पानी को और अधिक विषैला तथा घातक बना रहे हैं उससे कई तरह की चर्म संबंधी बीमारियां हो सकती हैं

रुड़की आइआइटी के जल विज्ञान विभाग के अध्यक्ष प्रोफेसर बृजेश कुमार यादव ने कहा

कि यमुना की सहायक नदी हिंडन पर कई विदेशी कंपनियों और सरकारी संस्थानों के साथ रुड़की आइआइटी का जल विज्ञान विभाग भी काम कर रहा है। उन्होंने कहा कि हमने देखा है कि सीवर और घरों से गंदा पानी तथा उद्योगों का गंदा पानी सीधे यमुना नदी में मिल रहा है जिससे यमुना नदी का पानी अत्यंत प्रदूषित हो गया है और जब यह पानी थोड़ी दूर जाता है और उसमें ऑक्सीजन की मात्रा थोड़ी भी मिल जाती है तो उसमें झाग बन जाते हैं उन्होंने कहा कि यह यमुना नदी का पानी अत्यधिक प्रदूषित हो चुका है जो चर्म संबंधी लोगों तथा कैंसर की बीमारी का सबसे बड़ा कारण बन रहा है।