

The Times of India – 27-December-2023

High ammonia levels continue to plague Yamuna

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New Delhi: The ammonia levels in the Yamuna continue to fluctuate and the water production is affected at the Wazirabad treatment plant by 40%, the Delhi Jal Board (DJB) stated on Tuesday.

"The ammonia in the river has reached the level of 2.3ppm, which is quite high. As per the survey teams of DJB, the pollution in the river continues to stay high and the water supply is likely to be affected," said a senior official.

For the past two days, the pollution levels have been increasing in the Yamuna. "It



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is expected that by Wednesday afternoon, the ammonia in the river water may reduce

and the situation may improve," said an official.

According to the evening

update of DJB, the Wazirabad water treatment plant (WTP) was treating 89 million gallons per day against the normal production of 135MGD. The production at the Chandrawal WTP has also been reduced, and till the afternoon, the production was down by 25%.

The crisis has affected the supply at several VIP areas of NDMC, Cantonment and south Delhi like Greater Kailash, Kalkaji, South Extension and Moolchand.

According to officials, a letter has been sent to the Haryana irrigation department pointing out that the sources of pollution in the river is inside the state's geog-

raphical territory and that it be stopped.

DJB is responsible to supply potable water in Delhi, for which it is dependent on the supply of raw water through drains in the Yamuna that passes through Haryana before entering the city.

The WTPs in Delhi are forced to shut down when the ammonia levels exceed their capacity of 1ppm.

"The Wazirabad WTP is an old plant and we need to upgrade its chlorination process so that the water production retardation (slowdown) does not occur every time the ammonia levels increase in the river," said a DJB source.

DJB warns of hit to water supply after ammonia levels rise

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NEW DELHI: Production of clean water has been affected at water treatment plants (WTP) in Wazirabad and Chandrawal due to high levels of ammonia in the Yamuna which will likely affect water supply in various parts of the city, officials aware of the matter said on Tuesday.

Chandrawal and Wazirabad WTPs have a capacity of 90 million gallons per day (MGD) and 135 MGD respectively. These plants supply drinking water to parts of northeast, central, west, and south Delhi.

A Delhi Jal Board official, who asked not to be named, said that 50% of water production was curtailed at Wazirabad and 25% at Chandrawal WTPs on Tuesday. "Due to high level of pollutants in the Yamuna, water production has been curtailed from the two WTPs. Therefore, only low-pressure supply is available till the situation improves," said the official.

However, DJB vice chairperson Somnath Bharti said the Chandrawal WTP was working at 100% capacity on Tuesday evening at 9pm while Wazirabad WTP was working at 70%.

"The situation is still improving, and DJB is working hard to restore normalcy in both the WTPs. At Chandrawal WTP, ammonia treating facility is under construction and will be inbuilt in the new upcoming WTP which can cure ammonia," Bharti said. Bharti said Wazirabad WTP mostly supplies water to areas in Old Delhi as well as some parts in south Delhi such as Greater Kailash I adding that the supply to these areas might be at low pressure.

DJB plants can treat up to 1ppm of ammonia in raw water through chlorination, but using the chemical beyond this limit leads to the production of toxic compounds. Whenever ammonia levels breach the 1ppm mark, operations at water treatment plants are hit. On Monday the level reached 2.3ppm.

Hindustan Times – 27-December-2023

WAPCOS acknowledged as water sector key stakeholder in Tanzania

In a Stakeholders' Meeting, the Ministry of Water, United Republic of Tanzania, recognised WAPCOS as a key stakeholder in the water sector for achieving goals. Minister Jumaa Hamidu Aweso commended WAPCOS for successful water supply project implementation. WAPCOS, a "MINI RATNA-I" PSU under India's Ministry of Jal Shakti, demonstrated a global presence in water, power, and infrastructure sectors across 50 countries, providing engineering solutions.

The Morning Standard – 27-December-2023

With reservoir going dry, Karnataka staring at water crisis this summer

ASHWINI M SRIPAD @ Bengaluru

KARNATAKA, a state already reeling under drought, is likely to face a drinking water crisis during summer. The situation may worsen in towns and cities with most of the reservoirs receiving poor inflows.

Expressing concern over the impending crisis, experts have advised people to use water judiciously.

With summer fast approaching, the government has decided to use water from its reservoirs for drinking and industrial purposes. Because of this, farmers, who are already in distress due to the failure of monsoon, may not get much water for irrigation.

According to KSNDMC, major reservoirs, which can hold up to 895 tmcft of water, now have only 394 tmcft. The reservoirs had 668 tmcft of water during the same period last year.

While the gross capacity of reservoirs in the Cauvery basin is 114 tmcft, as on date they have just 52 tmcft. They had 83 tmcft of water during the same period last year.

Sources in the revenue department, under which the disaster management wing functions, said the state may not see adequate showers in coming months to fill its reservoirs.

"As such, the water level in



the reservoirs has come down. Though the government is insisting that its priority is to ease the drinking water crisis during summer, the state may face a water shortage by end of February or early March," the sources said.

The crisis will also affect the places which depend on groundwater for drinking and irrigation purposes. According to officials from the disaster management wing, due to shortage, farmers have overexploited the groundwater source by drilling borewells. "At many places, the borewells have also become dry," they said.

Revenue Minister Krishna Byre Gowda and RDPR Minister Priyank Kharge had stated that officials have been directed to utilise the services of private water tanker operators in affected areas.

GS Srinivas Reddy, former director of KSNDMC urged people to avoid wasting water and plugging leaks.



Though the government is insisting that its priority is to ease the drinking water crisis during summer, the state may face a water shortage by end of February or early March.

Sources

Financial Express – 27-December-2023

Koteshwar Dam has a hydraulic head of 246 ft



KOTESHWAR DAM

The Koteshwar Dam is a gravity dam on the Bhagirathi River in Tehri District, Uttarakhand, India, approximately 22 kilometres (14 miles) downstream of the Tehri Dam. The dam is part of the Tehri Hydropower Complex and serves to manage the tailrace of the Tehri Dam for irrigation as well as to produce the lower reservoir of the Tehri Pumped Storage Power Station. The dam also features a 400 MW (4x100 MW) run-of-the-river power facility. The project was approved in 2000, and the first generator was turned on on March 27, 2011, followed by the second on March 30, 2011. Floods devastated the building site in September 2010. The diversion tunnel was later closed due to hill heaving/collapse in December 2010. The spillway was officially opened in January 2011.

TECHNICAL DETAILS

The dam stands 97.5 metres (320 feet) tall and 300 metres (984 feet) long. Its structural volume is 560,000 m³ (732,452 cu yd), and its peak

is 618.5 m (2,029 ft) above sea level. The spillway of the dam is made up of four 18 m (59 ft) wide and 16 m (52 ft) tall radial gates. The spillway has a discharge capacity of 13,240 m³/s (467,566 cu ft/s) when the reservoir is at flood level. Receiving water from Tehri Dam and collecting it from an overall catchment area of 7,691 km² (2,970 sq mi), the dam forms a reservoir with a capacity of 88,900,000 m³ (72,072 acre ft), of which 35,000,000 m³ (28,375 acre ft) is active (or 'useful').

The reservoir has a surface size of 29 km² (11 sq mi) and an elevation of 612.5 m (2,010 ft) at full pool. The dam's power station is a run-of-the-river type that uses the reservoir's active storage to pull the lake down 30 metres (98 feet) from a full pool. The power station, which is located on the right bank of the river below the dam, has four 100 MW Francis turbine-generators. The dam's height provides for a maximum hydraulic head of 75 m (246 ft).

Tehri will provide 270 mn imperial gallons of water

TEHRI DAM

Tehri Dam is the tallest dam in India and the 12th tallest in the world, standing at 260.5 m (855 ft). It is a rock-and-earthen embankment dam on the Bhagirathi river in New Tehri, Tehri Garhwal district. It is the principal dam of the Tehri Hydroelectric Complex and THDC India Ltd. Phase 1, which was finished in 2006. The Tehri Dam contains a reservoir for agriculture, urban water supply and hydroelectric power generating 1,000 megawatts (1,300,000 hp). The dam's 1,000 MW variable-speed pumped-storage technology is now under development, with the first two units projected to be operational soon.

TECHNICAL DETAILS

Tehri Dam is a rock-and-earth fill embankment dam that stands 260.5 metres (855 feet) tall. It has a length of 575 metres (1,886 feet), a crest width of 20 metres (66 feet), and a base width of 1,128 metres (3,701 feet). The dam creates a 3.54 cubic kilometre (2,870,000 acre

ft) reservoir with a surface size of 52 km² (20 sq mi). The installed hydropower capacity is 1,000 MW, with an extra 1,000 MW of pumped storage hydropower. The Koteswar Dam downstream creates the lower reservoir for the pumped-storage plant.

Tehri Dam and Tehri Pumped Storage Hydroelectric Power Plant are components of the Tehri Hydropower Complex, which also comprises the 400 MW Koteswar Dam. The Tehri Pumped Storage Project (4 x 250 MW) contains variable speed characteristics that can enhance round-trip efficiency when reservoir water levels vary.

Uttar Pradesh, Uttarakhand, Punjab, Delhi, Haryana, Jammu and Kashmir, Chandigarh, Rajasthan and Himachal Pradesh receive power. The complex will provide irrigation for 270,000 hectares (670,000 acres), irrigation stabilisation for 600,000 hectares (1,500,000 acres), and a daily supply of 270 million imperial gallons (1.2106 m³) of drinking water to Delhi, Uttar Pradesh and Uttarakhand.



यमुना में अमोनिया का स्तर बढ़ा, आज आधी दिल्ली में जलापूर्ति रहेगी प्रभावित

नई दिल्ली। यमुना में अमोनिया का स्तर बढ़ने से वजीराबाद व चंद्रावल प्लांट पूरी क्षमता से पानी का उत्पादन नहीं कर पाएंगे। ऐसे में आधी दिल्ली में जलापूर्ति प्रभावित हो सकती है। सबसे ज्यादा असर पूर्वी और दक्षिणी- पूर्वी दिल्ली में पड़ सकता है। मध्य दिल्ली में कम दबाव से पानी आएगा।

जल बोर्ड के मुताबिक दो दिन से अमोनिया के कारण वजीराबाद और चंद्रावल प्लांट पूरी क्षमता के साथ काम नहीं कर पा रहा। यमुना में अमोनिया का स्तर 2.3 बना हुआ है। सीएससी के बाद प्लांट में अमोनिया का स्तर घटकर 1.6 तक पहुंच पाया है। यह स्तर 1.2 होने के बाद ही प्लांट पूरी क्षमता से काम कर सकेगा। उम्मीद की जा रही है कि बुधवार दोपहर तक अमोनिया का स्तर कुछ कम हो सकता है। उसके बाद ही पानी का उत्पादन सामान्य हो सकता है। इसके अलावा भूमिगत जलाशय और बूस्टर पंपिंग की सफाई का काम बुधवार से शुरू होगा। इस कारण पूर्वी व दक्षिणी-पूर्व दिल्ली में दो दिन तक आपूर्ति बाधित रहेगी।



कालिंदी कुंज घाट। अमर उजाला

टैंकर से मंगा सकते हैं

बुधवार से बृहस्पतिवार तक पुरानी सीमापुरी बीपीएस, पंचशील एन्क्लेव, ओएचटी 4 स्टोरी डीडीए कालकाजी, सी-7 सफदरजंग विकास क्षेत्र, सी-ब्लॉक ईस्ट ऑफ कैलाश, आर.के. पुरम सेक्टर-5 फ्लैट, पॉकेट-डी दिलशाद गार्डन में पानी आपूर्ति बाधित रहेगी। इन क्षेत्रों में रहने वाले लोग पानी के लिए टैंकर मंगवा सकते हैं। बोर्ड का कहना है कि इस दौरान लोगों को पानी की उपलब्धता के लिए व्यवस्था रखनी होगी। जरूरत के आधार पर टैंकर व अन्य माध्यम से उपलब्ध करवाया जाएगा। ब्यूरो

पानी में आर्सेनिक, फ्लोराइड ज्यादा, पंजाब समेत 24 राज्यों को एनजीटी का नोटिस

चंडीगढ़ | पंजाब समेत 24 राज्यों के कई जिलों के पानी में आर्सेनिक और फ्लोराइड की मात्रा बहुत ज्यादा है। नेशनल ग्रीन ट्रिब्यूनल (एनजीटी) ने एक रिपोर्ट का स्वतः संज्ञान लेकर पंजाब-हरियाणा समेत 24 राज्यों को नोटिस जारी किया है। मामले की अगली सुनवाई 15 फरवरी को होगी। एनजीटी के अनुसार पानी में इन धातुओं, रसायनों की तुरंत रोकथाम और सुरक्षात्मक कदम उठाने की जरूरत है। 25 राज्यों के 230 जिलों के कुछ हिस्सों में भूजल में आर्सेनिक पाया गया है। 27 राज्यों के 469 जिलों के कुछ हिस्सों में फ्लोराइड पाया गया है। न्यायिक सदस्य न्यायमूर्ति सुधीर अग्रवाल और विशेषज्ञ सदस्य ए सेंथिल वेल की पीठ ने कहा कि दोनों रसायनों या धातुओं का मानव शरीर व स्वास्थ्य पर विषाक्त प्रभाव पड़ता है।