

Brief Report on the Badly affected Drinking water of Chunnakam Power Station Area

Background

Continuously NWSDB observed fuel smell in Chunnakam water intake site from 2012, so that water quality tests carried out in intake and suburbs and observed some extent of oil and grease residues. The intake site is located very close to the Chunnakam fossil fuel power station. Due this actions were taken to stop pumping from Chunnakam Intake site and continued supply from Pokkanai Intake.

Actions Taken

Chairman Pradesha sabha (Valikamam –South) arranged a meeting and site visit with all relevant institutions (**29th August 2012**). On 12th September 2012, NWSDB forwarded the relevant reports to all the state holders such as Government Agent (Jaffna), Divisional Secretary, Chairman (Pradesha Saba – Valli-South), MOH (Chunnakam), CEA, BOI and CEB to aware the public and further actions. DGM (Energy Purchase – Transmission Division) CEB, reported about this problem to Managing Director (Northern Power Company (Pvt) Ltd) on 7 Nov 2012, but no any favourable action was taken and CEB also not responded in this regard. Finally a meeting was held with **Secretary, Ministry of power and energy**, on 3rd June 2013, Addl.GM (N/C) of NWSDB and Regional Chemist (Jaffna) participated and explained the problems faced. CEB General Manager and all relevant Addl.GMM, DGMM attended to this meeting. General Manager (CEB) strictly instructed their contractors to stop the improper dumping and keep the CEA standards on the site.

NWSDB started to analysis around 100 wells in the surrounding of the Chunnakam power station, which includes Uduvil and Kopay DS divisions (GN division J/196, J/197 and J/267) in **November 2013**, around 80% of the wells were polluted with waste oil with the range from 0.33 to 19.40 mg/l (SLS limit 0.2mg/l – 1.0 mg/l). The people living in this area are using these water sources as drinking water. NWSDB has informed to MOH (Chunnakam) on **03rd June 2014** and Consultant Physicians, Teaching hospital Jaffna on **07th May 2014** regarding this pollution issue.

16 numbers of wells were analyzed and reported as per the house owners' requests. Area office CEB (Chunnakam) also tested their wells and that reports also indicated the oil grease contamination in the area.

Outcome From research Studies

- Totally 150 wells were analyzed.
- 109 (73%) wells have shown the higher oil level than the standard while 07 (4%) wells were under the limit and 34 wells (23%) were not contaminated with oil and grease.

- The oil and grease contamination was observed within 1.5 km surrounding of the power station.
- As per the Annexed map (contamination in the area at **13th August 2014**), the high oil and grease concentration layers were observed in the surroundings of the Chunnakam power station area.
- Oil spreading pattern was observed towards north, up to 1.50 to 2.0 km. Oil contaminants were spread further in North compared to the other direction which have a spread of less than 1.5 km.