## HEALTH SURVEY OF THE VILLAGERS AROUND JADUGUDA TAILINGS POND.

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## Executive Summary

The impact of UCIL's operations on the environment, in and around Jaduguda has been a matter of debate. From time to time, articles have appeared in the media staing/claiming that the health of villagers residing near the Tailings Pond has been adversely affected. A petition in the Supreme Court mentions vague complaints, symptoms and diseases due to ionizing radiation, with special emphasis on genetic and teratogenic effects in three generations of population of six villages. It is claimed that twenty-five deaths due to radiation have occurred.

Earlier medical studies carried out jointly by the Doctors of State Government, the Tata Main Hospital & the B.A.R.C. along with UCIL did not find any corroborative evidence of adverse health effects (due to radiation). Despite this, rumours continued in the media. To bring out the true situation UCIL initiated comprehensive health survey, following a demographic survey. This report provides authentic individual health records of the residents of the three villages.

The objective of this survey was to obtain baseline Health Status of villagers situated within 1.6 Km radius of the Tailings Pond to ascertain and assess adverse health effects, if any, due to exposure to ionizing radiation on the population.

Residents of the villages studied are exposed to a total dose of radiation of 2.81 mSv annually. Of this, UCIL operations contribute only 0.15 mSv per year. The rest is from natural background radiation, which is high around Jaduguda due to the Uranium deposit.

A total of 949 villagers comprising of 260 males, 314 females and 375 children below 12 years age were examined. Most of the villagers were non-vegetarians, 27.8% consume alcohol and 7.17% were smokers. Number of married females was 246 and 240 out of them were fertile. The survey revealed major health problems as malaria, anaemia and malnutrition. One case of benign tumour (lipoma) was seen. One case of congenital malformation was detected and no case of teratogenic effects was detected. Sterility level was not unusual/ abnormal and there was no death due to radiation.

It can be concluded that the health status of these villagers is almost normal. The problems they have can be seen in any village in India with similar socioeconomic parameters/conditions. There is a need to educate the public about the useful applications of nuclear energy in medicine, agriculture and industry through lectures, symposiums and workshop etc.