

CHERNOBYL 25 YEARS ON, A POLICEMAN'S VIEW

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The catastrophe at the Chernobyl nuclear power plant on 26th April 1986 was no accident. It was a direct result of human error; as such it was completely avoidable and was the consequence of bureaucrats, civil servants and politicians ignoring sound professional and technical advice given by very competent and highly qualified scientists and engineers.

The technical details of what happened are readily available on the internet (Google Chernobyl). This article looks at why it happened and the potential lessons that need to be learned. It is my opinion that, had the professional advice given been heeded, the plant would still be running safely today and for many years to come.

As a retired Scotland Yard Chief Superintendent I was working as a consultant to the Interior Minister of Ukraine in 2009. I was working with the Police and State Security and was given the opportunity to visit the entire Chernobyl site and to talk to people present on the day of the catastrophe and to people currently involved. I was also given access to information by the State Security. I have no means to verify what I was told and shown but I believe it to be true.

There is a 30Km exclusion zone around the Chernobyl power plant. Almost everyone who lived within it has been evacuated, though one elderly couple refused to leave their home and continue to survive with no obvious ill effects. There is then a police manned cordon at 5Km, access on a needs only basis, then finally a 1Km cordon where access is on a timed basis and each entrant carries a Geiger counter to measure the dosage of radiation they have received. Even 25 years on, the longest one can stay safely is about 45 minutes a day. Interestingly, the wild life within the 30Km zone has really flourished, yet within the 1Km zone, there is an eerie silence; no bird song, no sound of

insects, no other animals. At Pripyat, the nearest town to the power plant, there is a funfair completely silent and rusting. In a car park there are Soviet tanks, too radioactive to be used. The power plant was deliberately built alongside a river, to provide a water supply. The bridge over the river is so radioactive it has a 20kph minimum speed limit and the fish in the river are worryingly large. I watched one eat a loaf of bread in one mouthful.

Discussions with those involved then and now revealed five major bad decisions by the bureaucrats, civil servants and politicians in charge. The cost of these runs to many billions and thousands of lives. Bear in mind that at the time this was part of the Soviet Union and no one dared disobey an edict of the Supreme Soviet.

Four nuclear power stations were built at the Chernobyl site, scheduled to be up and running by 1st December 1985. This date is the official start of winter and the power demands would increase noticeably as public buildings were then heated. There was a small amount of slippage and, though finished, the safety systems had not been tested. Against the advice of the scientists and engineers, the Supreme Soviet directed that all four power stations would start generating immediately and the safety systems would be tested at a later date. (Bad decision 1). There was no appreciation or acceptance of the fact that nuclear power stations cannot be simply switched on and off.

Eventually it was agreed that any test should wait until the

winter was over, however, the civil servants were adamant that a safety test had to happen despite all the warnings from the experts. They conceded that only one of the four plants needed to be tested but ignored the complication and dangers of disabling fail-safe circuits that were designed to react in fractions of a second. (Bad decision 2).

The tests were scheduled to take place on 25th April 1986 at 11am. The experts were nervous as they had no experience of trying to turn off a reactor and all its fail-safe devices. They moved the best technicians and engineers from other shifts to ensure they had the most skilful team. At 10am the Supreme Soviet sent an edict saying that as a large coal power station in Belarus was not working, the test was postponed until 11pm that same day, (when some of the least experienced staff would now be on duty). (Bad decision 3). Despite protestations from the experts, this decision was non-negotiable.

The rest is history, though the death toll need not have been so high. When the fire brigade arrived they checked for radiation. The Geiger counter showed zero. They did not know this was because the levels were 100 times the maximum of their machine. Four hours later, a military Geiger counter was produced and it showed radiation levels from 1 to 6 Sievert (6 is normally fatal). By then it was too late for over 350 firemen. The evacuation of residents was delayed for many hours as policy dictated that Soviet citizens could not be



Fig 1 An aerial view of the Chernobyl nuclear power plant, shortly after the disaster in April 1986, which released about 400 times more radiation than the U.S. atomic bomb dropped over Hiroshima

moved until accommodation for them had been identified. So, sadly, the evacuation of the residents of Pripyat and the city of Chernobyl did not start until 2pm on 27th. Many deaths from radiation and subsequent cancers could have been avoided if bureaucrats had listened to and acted upon the expert advice of scientists. (Bad decision 4).

During the evacuation of citizens, they were told they could not take any metal objects with them and were scanned before being allowed on the bus. Many ran home to leave watches and jewellery on the kitchen table before hurrying back to catch the bus. Within 3 months looters had ransacked thousands of these homes and stolen a small fortune of radioactive watches and jewellery. Most of this found its way to the street markets of London, Paris and other major cities of Europe where now

there are unsuspecting purchasers with unexpected skin cancer. It is of little consolation to them that no doubt many of the thieves have suffered as a result of the radiation they received.

Unbelievably, the Supreme Soviet directed that the remaining 3 power stations would continue to operate, despite each being within 500 metres of the catastrophe. They remained fully staffed and ran for a further 10 years. Many of



Fig 3 Bumper cars in a funfair at Pripjat, the nearest town to the power plant

the staff have suffered the effects of radiation related illness and death (Bad decision 5). This was despite the advice of scientists and doctors.

The core of the reactor was so hot it melted down through the ground some considerable distance. I was given conflicting information as to whether it had now cooled or was still hot and moving. Those who believed it was still hot expressed concern that it was heading towards aquifers and if it reached them (estimated around 2020) then the resultant super-heated steam might blow the core back out and send masses of radioactive dust into the atmosphere in a repeat performance of 1986.

I am inclined to believe this version, as thousands of tons of concrete have been poured down the hole and placed on top; then recently work has begun on fitting an enormous steel canopy over the top. Why

do this if the core has cooled?

In conclusion, I believe that, despite being the worst nuclear catastrophe to date, Chernobyl should not be quoted as similar to those of 3 Mile Island, (which was the consequence of faulty machinery and poor fail-safe equipment), or more recently in Japan, (which was the result of underestimating the effects of the elements or 'Acts of God'). Chernobyl was no accident or equipment failure, it was the direct result of bad decisions by people in authority who were arrogant and should have known better. As such it was completely avoidable. The advice they were given was accurate, of high quality and based on scientific fact – it would be the same today. To ignore it on the basis of some political need will not make the facts go away; the resultant outcome proved this.



Fig 2 Memorial to the over 350 Firemen exposed to radiation levels ranging from 1 to 6 Sievert at Chernobyl (6 is normally fatal)



Fig 4 Radioactive railway bridge with a minimum speed limit of 20kph