

9th July 2004



Copy

The Rt Hon Nick Raynsford MP Minister for Local and Regional Government C/o Office of the Deputy Prime Minister 26 Whitehall London SW1A 2WH

Dear Sir

The Green Party has become aware of the following assertions relating to Mr Ray Fox, of 337 Wokingham Road, Reading, Berkshire.

Ray Fox lived until recently in Earley, near Reading, Berkshire. In the mid 1990s he dug up a drain at the bottom of his garden to clear a blockage which was flooding his garden. The land drain crossing the corner of his property was blocked with some tarry black material which Ray cleared away. Shortly after this he became seriously ill. His body became covered in what appeared to be burns and blisters.

The symptoms appeared to be those of radiation poisoning. Thus began several years of struggle to obtain an explanation for his illness and its origin, a struggle that has slowly revealed elements of what appear to be a most extraordinary cover-up — a secret underground atomic research site operated in Reading in the 1960s by the Shell Oil Company as part of a research effort into the development of atom bombs. Parts of the story have been revealed in newspaper articles and on television, but Dr Chris Busby, of the Green Party has visited the site on two occasions and made radiation measurements. As you will know, on 25th Nov. 2002 Dr Chris Busby and Caroline Lucas MEP had a meeting in Brussels with Stephen Kaiser of the EU Radiation Protection unit to demand that they investigate the situation.

The facts appear to be as follows. Following his contamination and illness, Ray discovered that the drain he had unblocked was an illegal connection to the public land drain to the River Loddon and was apparently draining material from a Shell 'oil depot' at Earley, which had existed on a site at the bottom of his garden until the 1980s. After the closure of the depot, the land remained derelict until acquired by a developer in the late 1990s when it was 'remediated' by removing a metre of topsoil and replacing it with fresh topsoil. A new housing estate was built on the site and people now live there.

There seems to be no doubt about Ray Fox's illness. It began with an array of sickness or poisoning symptoms and has progressed seriously; Ray is now a very sick man. He has had urine analysis done in Germany where slightly increased levels of Uranium and Plutonium were



detected. These reinforced the suggestion that it was radioactive contamination of the drain that was the origin of the problem.

Following Ray's complaint about the drain and his illness, Shell immediately arranged for contractors to visit the property and dig up the drain, water jet the remaining sewer and close the system up, replacing all the material they removed with fresh soil. Chris Busby employed a portable gamma spectrometer to make radiation measurements of Ray's house and garden as part of the Mark Thomas investigation on Channel 4 TV. Beta and alpha scintillation counting showed very slightly raised levels and there were slightly elevated levels of radiation, mainly gamma signals from natural Thorium 234. The house itself had slightly high levels of radiation, particularly the lower blockwork in some rooms, but none were high enough to be considered a health risk in themselves. Samples were taken on behalf of Ray's insurance company and sent by their advisor, Dr Kartar Badsha, to be analysed by LGC in Teddington.

Results showed the presence of various toxic organic chemicals and heavy metals, as would be expected from groundwater near an oil depot, but there were also some very interesting radiochemical results. These are shown in Table 1. However, there were some measurements of Uranium and Plutonium that gave cause for concern Levels of Plutonium 239+240 seemed high. In the Cawse and Horrill grassland survey of 1977, mean levels in the area were between 0.02 and 0.7 Becquerels per Kilogram (Bq/kg). We are advised that since then sea-to-land transfer from the contaminated Irish Sea has increased the levels but in a survey carried out by Southampton University in 1997 the mean level in the Berkshire rural zone was 0.85 Bq/kg and the highest measurement made, 10Bq/kg, was at the perimeter fence of the Atomic Weapons Establishment in Aldermaston.

On this basis, the Plutonium levels in Ray's house were up to 60 times higher than would be expected. Although we understand that NRPB have maintained that the material is from weapons fallout, we are advised that Plutonium-238 levels were far too high to be explained on the basis of weapons test fallout, and the ratio of Pu-238 to Pu239 was also too high. The weapons fallout activity ratio for Pu239+240/Pu238 is between 13:1 and 28:1 but the Ray Fox samples were showing ratios of between 1:1 and 3:1. Pu-238 is produced by neutron irradiation of U-238 in a nuclear reactor and so high levels of Pu-238 suggest the presence of a reactor, which is a suggestion that seems to fit in with other historical evidence obtained by Mr Fox and others.

<u>Table 1 Activity of some alpha emitters found in Ray Fox's garden and house.</u> Normal values for Pu-239 + 240 should be 0.02-0.7 Bq/kg

Isotope First series, house dust Second series, garden soil Pu-239 + 240 54.9 9.8 Pu-238 18 10 U-238 18 10 U-235 44.7 2.6 Am-241 Mot meas 6.3

What supports the argument that there has been contamination from a reactor or fissionable nuclear bomb material is the ratio of Uranium-238 to Uranium-235. Although the absolute levels are not high, this ratio is an unmistakable fingerprint for material from a reactor or a bomb core. It is enriched Uranium that is in Ray Fox's house. As you know, the normal primordial Uranium ratio is 137.88. Of the 516 samples analysed in the 1997 Newbury/Greenham Common survey by Ian Croudace of Southampton University all except samples from close to Aldermaston gave values between 137.36 and 138.40. Of the 68 samples taken from near Aldermaston there were



only 11 samples outside this range and only one with a ratio as low as 98.03. The ratios in the samples from Fox's house are given in Table 2. They show that the U238/235 ratio is uniformly 24.5 and that therefore there is contamination from one source which must be a nuclear reactor or the fissile core of an unexploded atom bomb. However, there appears to be other evidence.

Table 2 Uranium ratios from Ray Fox's garden

Sample U238 Bq/kg U238 ppm U235 Bq/kg U235 ppm Ratio238/235 House dust 18 1.45 4.7 0.059 24.5 Garden soil 10 0.807 2.6 0.033 24.5

In the course of investigating this strange story, we have now found that there was indeed an experimental nuclear reactor beneath the ground at the Earley depot. It was visited by Dr David Greenwood who worked at University College London. Dr Greenwood has sent an affidavit to the European Commission describing the underground laboratory. The reactor was a graphite moderated reactor of about 30 feet diameter buried several metres deep. It was used for nuclear research in connection with the Manhattan Project and later nuclear developments. Greenwood named several eminent scientists who knew of the existence of the reactor, including Prof David Bohm, the Nobel laureate. He explained that the radioactive contamination which was being produced by the research there was affecting the special oils he went there to obtain for his high vacuum mass spectrometry research.

We are concerned that there may have been an accident at this reactor site shortly before it was closed. It appears that the Earley site was used to move solvents by rail and there was a railway siding there. In 1986 there was a fire and an explosion which was recorded locally as a minor railway accident involving a diesel spillage. However, local people reported that the earth shook and that manhole covers blew off. The fire brigade was called and the incident closed. After this, the site was abandoned. Topsoil was removed, a metre of new soil was laid and the site was sold for housing development in the 1990s. The evidence suggests that the reactor is still there and is leaking and contaminating the local area. Test results (2003) in Lambourne Gardens indicate the need for further checking by alpha spectroscopy.

It is acknowledged that there is now in existence a report purporting to be independent from a firm of consultants - Atkins Nuclear. However, without being too critical, it does not address the distinct differences between the report submitted by the Environment Agency compared with those conducted by independent scientists.

Following discussion at the Green Party Conference in 2002 where a number of members of the public from Reading expressed concern about the existence of a buried nuclear reactor in a populated area, the conference agreed to pursue the matter.

I am therefore formally writing to you to ask for your comments on this account and to request the following actions:

- 1. Full co-operation with the investigations by the Chemical and Nuclear Divisions of the Environmental Directorate of the EC.
- 2. Full and transparent investigation of the contaminated site using underground building location equipment, full disclosure of the findings and an open assessment of the scale and consequences of the contamination.



- 3. Removal of any reactor and associated machinery and decontamination of the site.
- 4. If necessary, implementation of a programme to address the public health impact of the site on local residents with provision of medical care and compensation to victims.
- 5. Investigation of the role of government agencies and departments at national and local level in this matter.

Yours faithfully

Hugo Charlton

Chairman of the Executive

Green Party of England and Wales

Copies to:

Chief Executive, Wokingham Unitary Council

Baroness Barbara Young, Chief Executive, Environment Agency

Thy. Cll

The Rt Hon Eric Morley MP

The Rt Hon Martin Salter, MP for Reading West

The Rt Hon John Redwood, MP for Wokingham

✓Mr Raymond Fox