THE HSE 1991 REPORT. UNPUBLISHED!

In 1990 the Health and Safety Executive carried out a study of Organophosphorus(OP) Sheep Dips and their effects on farm workers. A report on the study was produced in May 1991 but was suppressed by the HSE. The first page of the report carried this warning "Not to be communicated outside the HSE without the approval of the authorising officer." The HSE even denied access to the report to Parliament when it debated the problems arising from OP dips.

The HSE's suppression of the report meant that it was unavailable to the OP, Gulf War Syndrome and CJD litigations, the BSE Inquiry, the Committee on Toxicity inquiry into OP, and to the criminal trials of people affected by OP, eg Robert Billings. Andy Burnham, who attended a 19-11-2015 meeting on sheep dips should have been given the information contained in the report when he was an MP from 2001 to 2017, as should all members of both Houses of Parliament. Sufferers of sheep dip poisoning obtained a copy of the report that was scanned and put through Optical Recognition to produce a digital text version that can be viewed in the archive of the Sheepdipsufferers website.

The second page of the report listed **some** of the effects of the toxins contained by dips:

headachefatigueblurred visionpyrethroidspyrethroidsphenolssolventssolventsOPsphenolsepichlorohydrin

glycol ethers thiram OPs OPs

dizzinessnauseasalivationsore throat/coughpyrethroidspyrethroidspyrethroidssolventssolventssolventsphenols

phenols glycol ethers OPs epichlorhydrin

glycol ethers Ops

Note the presence of Thiram, a carbamate, an anticholinesterase, having the same potentially lethal effects as OP such as Sarin, VX and Novichok. The HSE failed to comment on the implications of mixing Thiram with OP.

Note the presence of epichlorohydrin, a mutagen. Why was the national sheep flock being dipped in it, and farm workers exposed to it?

The report fails to mention the sensitisation problem that farm workers suffered, which caused them to be severely affected by small doses of substances long after exposure to dip.

But the most serious deception in the report concerns "phenols". There are many different phenols, some of which have very severe toxic effects. Hidden in the phenols was a mixture of non-phenolic toxins and pollutants that were included in some dips in huge quantities and would have had massive toxic implications as they were carcinogenic. This variable mixture, a by-product of an industrial process, we refer to as "CCX". The HSE cannot have missed it and would have understood the implications, but suppressed it from even the unpublished report!

Even now, the HSE refuses to answer basic questions about the 1991 report. The Chief Executive, Sarah Albon, and the Chair of the Board, Sarah Newton, have been written to but the key questions remain unanswered. Why were HSE officers visiting farms and inspecting dipping facilities while staying mute about the dangers known to the HSE? How were farmers supposed to deal with the requirements of COSHH regulations when the toxicity of the dips was kept secret? Why was the

Poisons Act 1972 not enforced with regard to dips that farmers were required by law to use? How were these products licenced under the Medicines Act?

Below are the first two pages of the HSE 1991 report:

Health and Safety Executive
FIELD OPERATIONS DIVISION
SHEEP DIP SURVEY 1990

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Internal Report May 1991 Not to be communicated outside the HSE without the approval of the authorising officer.

INTRODUCTION

Over the last few years, there has been a growing interest within the farming community regarding possible health effects following the use of sheep dip. As they become aware that others are experiencing problems many farmers are voicing their complaints of ill health for the first time.

This, plus the knowledge that sheep dips are due for relicencing and review, led us to undertake a survey with the following aims:

- 1. To look for evidence of personal exposure and possible absorption of major constituents of sheep dip, including solvents and phenols. The increasing availability of passive monitors made this possible, whereas in the past, cumbersome pumped equipment was impractical for such an operation.
- 2. To validate the measurement of urinary metabolites of specific organophosphates (OPs) with a view to its future use in the routine detection and monitoring of OP absorption. The advantages of this technique would be that it is more direct and more sensitive than the traditional cholinesterase estimation. It is also non-invasive.

- 3. To take advantage of the availability of cholinesterase inhibition detection badges. These provide a quick field technique for detecting personal OP contamination, especially during post dip handling of flocks.
- 4. To address the need for correct and consistent guidance on protective clothing suitable for sheep dipping. Investigation of recent incidents had indicated that even the manufacturers were issuing free equipment of the incorrect standard.
- 5. To use some of the blood samples collected for other purposes for phenotype research regarding individual differences in rates of esterase activity.

Organophosphates, being the active ingredient, have traditionally been blamed for the symptoms reported following dipping. OPs, however are rarely formulated as pure compounds, but as a mixture with carriers, emulsifiers, etc. It is possible that non-specific symptoms such as headaches, reported after using these products may indeed be due to factors other than the OP.

The symptoms described tend to fall into three main categories - those which could be consistent with exposure to solvents, phenols or OPs. They are usually acute, experienced on the day or evening of dipping and lasting, at most, only a couple of days. There also have been anecdotal reports of delayed and long-term symptoms.

Non-specific symptoms such as fatigue and headache are similar to those which could be experienced following a long, hard day's work, or due to a viral or zoonotic infection.

Identifying the source of these symptoms is further bedevilled by the fact that the various chemicals present in the dips can often produce similar symptoms. Examples of these are shown in the following table:

<u>headache</u>	<u>fatigue</u>	blurred vision	
pyrethroids solvents phenols glycol ethers OPs	<pre>pyrethroids solvents epichlorohydrin thiram OPs</pre>	phenols OPs	
dizziness pyrethroids solvents phenols glycol ethers	nausea pyrethroids solvents glycol ethers OPs	salivation pyrethroids phenols OPs	<pre>sore throat/cough solvents phenols epichlorhydrin</pre>