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REPORTER: Jenny Cuffe

PRODUCER: Liz Carney

EDITOR: David Ross

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ACTUALITY IN MEP LOBBY

WOMAN: Good morning everyone. Well done for making it. We've got Robert Evans who has very kindly come along today as well ...

CUFFE: In a hall in Westminster, environmentalists are gearing up for a battle in Europe.

WOMAN: People have a choice as to how many cigarettes you smoke, how much alcohol you consume, how much fat and sugar you eat in your diet. But you have no choice whatsoever as to how many chemicals you're exposed to via products in the home.

CUFFE: Green NGOs want to ensure that the new intake of MEPs in Brussels will put chemical contamination at the top of their agenda. In the next few months the European Parliament will be asked to vote on an ambitious piece of legislation that will require manufacturers to test about 30,000 chemicals in everyday use and prove that they're safe. Environmentalists say it'll protect us and the environment from hidden danger; but manufacturers believe it could cripple the European chemical industry.

SIGNATURE TUNE

ACTUALITY OF JAN IN KITCHEN CUPBOARD

BACHELOR: Under the sink we've got the usual things.

CUFFE: Uh huh.

BACHELOR: You know, proprietary floor cleaner. I've got one here that's especially for stainless steel.

CUFFE: And do you know what's in that one?

BACHELOR: I have not a clue. I don't know why I've got twenty-odd products in my cupboard, because I've not needed them since I stopped using them.

CUFFE: Jan Bachelor is taking a new look in her kitchen cupboards, wondering whether the things she's been buying are causing her unseen harm. She and her family in Edinburgh recently took part in a research study which revealed that they all have a cocktail of man-made chemicals in their blood. What did they find, then, when they looked at your blood?

BACHELOR: These pesticides, the DDT-type pesticides. PCBs – these are banned, these have not been around since the seventies. Then we get into the modern ones – flame retardants. All of us have flame retardants, plasticisers, etc, and I can't work out where I've got them. I don't understand them, and as a mum I actually do worry that I have no control over what I am giving my children, what's going into my children.

CUFFE: The purpose of the small research study was to compare three generations. Jan's mother comes from a more industrial part of Edinburgh and in her younger days hazardous chemicals like DDT and PCBs were used without anyone questioning their effect on the environment. So she expected she'd be more contaminated than her granddaughter Holly.

JAN'S MOTHER: It is quite worrying to think that my granddaughter, who is fifteen, she'd have more chemicals than I do.

CUFFE: And Holly, were you surprised that you've got more chemicals in your blood than your gran?

HOLLY: I'd assumed I would have chemicals inside me, but I never once thought more than my granny, and it's quite scary really to think that inside me there's chemicals that were banned fifteen years before I was born. I ...

CUFFE: So are worried about it all?

BACHELOR: Concerned. To say shocked, worried, is a bit of a bogeyman, but I am concerned because we really don't know what they're doing to us and we don't know in the future what they'll do to us.

CUFFE: There were similar results from the other families in the study, which showed that some children have more chemicals in their blood than parents and grandparents, and that there's little relationship between where people live and their chemical profile. The campaigning group which commissioned the blood tests is WWF. Michael Warhurst, their chief European expert on chemicals, admits that there's no proof that chemicals are doing the Bachelor family any harm, but says we can't afford to wait around for the evidence.

WARHURST: We are always exposed to a mixture of chemicals. We constantly discuss chemicals as if we get exposed to one at a time, but we don't. There's always a mixture. And if you are dealing with a chemical that accumulates in the body, the chemical that is produced now and goes into products now will be remaining in people's bodies for decades.

CUFFE: Isn't it scaremongering to test blood and say, 'Oh there are so many chemicals in it,' without actually pointing out that the chemicals are there at such a level that it's unlikely that they would cause any damage, or at least at a level where there is no proof that they would cause damage?

WARHURST: To try and predict what level is harmless is very difficult. You can say with today's science we think this level is harmless, but in five years time science will move on and you will find a change in those figures, and that changes all the time in chemicals. There is a constantly new science which shows things to be more dangerous than before.

CUFFE: Everyone agrees that the present control is woefully inadequate. Chemicals that have come on the market since 1981 have been tested for safety, but there are thousands of older chemicals in common use and very little is known about them. Some of those are toxic, persistent and build up in living tissue. And it's these that worry Sir Tom Blundell, chair of the Royal Commission on Environmental Pollution. He says that whenever they turn up in the environment – whether it's in fish in British rivers or polar bears in the Arctic – alarm bells should ring.

BLUNDELL: As you go up the food chain to things like polar bears, you find they become very very concentrated, and of course that's a message for us. I think if you find any kind of chemical in very high levels, so there's evidence that it's bio-accumulated, certainly in human tissues or in blood, especially for example in breast milk, I would ban them until exhaustive studies have been done to show that they weren't going to cause harm.

EXTRACT FROM TV NEWS

NEWSREADER: The Food Standards Agency has set new guidelines in the amount of oily fish we should eat..

CUFFE: There have been a series of public scares about contamination of oily fish. Earlier this year, American scientists reported that farmed salmon from Europe contained high levels of toxic chemicals used as flame retardants. The scientific name for them is poly-brominated diphenyl ethers or PBDEs. To Jan Bachelor's astonishment, they also turned up in the blood samples taken from her family. She had fifteen types of flame retardant in her blood, the highest number, closely followed by Holly who had fourteen, whereas her husband David had only two.

BACHELOR: I do know that we all have flame retardants in us. They're used in all electrical appliances and computers and such like. I don't spend a lot of time on the computer. The kids do. The one thing that the three of us do consistently that might explain why is that we spend a lot of time in my small car that's practically all plastic inside. That's the only thing I can think of that perhaps we've been exposed to on a daily basis. There's nothing I can do about it. I can't get rid of the car, I can't get rid of the computer or whatever.

CUFFE: Two types of poly-brominated flame retardant have been taken off the market, and some scientists have now raised doubts about a third, a type called Deca which is widely used. Deca was among the chemicals found in Jan and both her children. Flame retardants have saved thousands of lives in Britain and there's a lot hanging on the current debate about its future.

ACTUALITY IN MANCHESTER

CUFFE: From this office block on the outskirts of Manchester, I'm looking down at one of Britain's largest chemical plants. Steam is billowing from tall grey chimneys into the evening sky. Great Lakes, the American owners, are a major producer of Deca flame retardants which they sell across the world. David Buszard is their advocacy and marketing manager for Europe. What have you got on the window ledge here?

BUSZARD: These are some examples of products containing flame retardants manufactured here at Trafford Park. This is a typical printed circuit board, it could be in a television. Flame retardants would be in those.

CUFFE: And what's this thing over here? It looks like the inside of a car.

BUSZARD: This is part of a car, yes. This is just a door panel from a car. Various things can be flame retarded here, from the textiles on these panels here, there are foam inserts in this here. This is a bit of upholstery fabric. If you look on the back of it here, you can see a fine coating on the back. That is the flame retardant coating.

CUFFE: As a pilot project for new chemical regulations now being discussed in Europe, Deca has just been through a lengthy risk assessment. Technical experts were asked to compile a dossier of scientific research – about one and a half inches thick – and come to conclusions about the chemical's safety. It's been an expensive exercise.

BUSZARD: In the case of Deca BDE, risk assessment took literally ten years almost to the day. There were over a hundred studies done, different types of studies, and the cost to industry was in excess of 4 million euros.

CUFFE: Now that's one chemical cost that amount?

BUSZARD: That's one chemical. At the end of that risk assessment it came out with a clean bill of health, no restrictions on its use.

CUFFE: But what price reassurance to the public and what price safety?

BUSZARD: Well, absolutely, you've got to strike a balance between risk and benefit. Flame retardants such as Deca save lives, save thousands of lives. Whilst in that case it was done to reassure the public, I don't think that's the sort of thing that can be done for every flame retardant or every plastics additive.

CUFFE: But the risk assessment hasn't laid environmental concerns to rest. Scientists have discovered Deca flame retardants in breast milk and new research from Sweden suggests it may cause developmental problems in laboratory animals. Michael Warhurst of the WWF thinks it should be withdrawn from the market.

WARHURST: Deca was known for many years to be something that accumulated in the environment. It was found in sediments and it was just around. But industry claimed that the molecule was too big to get into wildlife. Well, the first research that actually showed it in higher organisms was research that showed it in the eggs of peregrine falcons, and that research was actually only printed in the literature in 2003, so it's very recent that we've discovered that this chemical is getting into biota, so over really

WARHURST cont: just the last two or three years it's changed from something that wasn't in wildlife to something that definitely is in wildlife. But then, following on from that, the chemical Deca has been found in all sorts of other places, including polar bears, including a third of the people tested when WWF tested MEPs a few months ago.

CUFFE: But just because it's there, does it do any harm? On this question, there's a yawning chasm between environmental groups and the industry. David Buszard at Great Lakes remains convinced his product is safe.

BUSZARD: It has however become a bit of a political football that's been conveniently used by the NGOs, because it's something that's easy to analyse for.

CUFFE: Well you say it's a political football, but I mean they're only raising concerns because it's been found in unexpected places, for instance, in polar bears and in the eggs of predator birds.

BUSZARD: Yes it has, but at extremely low levels. We're talking here of very very low levels. The thing about Deca is, it's possible to analyse it in parts per trillion. A part per trillion is equivalent to one second in 32,000 years, so you can see how small the actual levels and concentrations are.

CUFFE: But it's also been found in breast milk. Now that really does raise concern.

BUSZARD: The Deca in breast milk, I'm not even sure that it's been fully confirmed. This has all been taken into account, incidentally, in the risk assessment. All this data has been submitted into the risk assessment and it's taken into account in that. Now Deca is a fire retardant. People's lives are at risk and these are real lives, these are real fires. What we're talking about here, when you look at risk benefits, they pale into insignificance.

CUFFE: At the moment, it's up to individual governments to decide who to believe and what to do about Deca. In Britain, the man with most influence is Colin Church, a top civil servant at the Department for Environment, Food and Rural Affairs. The Ministry, he says, stands by the risk assessment that Deca is safe, but as a precaution it's commissioned further research.

CHURCH: We've approached the industry, the people who make and use Deca, and we've said to them, 'Look, let's all be sensible about this and let's find ways of making sure as little as possible gets into the environment, so that if there is a problem in ten, twenty years time, or even five years time, we're dealing with lower levels in the environment than we would if you just threw buckets out of the window every five minutes.'

CUFFE: You describe that approach as precautionary, but I mean, there are others, including scientists, who would say that, given the evidence that is coming out about Deca, the precautionary approach would be to ban it.

CHURCH: For us it is precautionary to take action that goes beyond what the pure evidence would suggest, and that's what we're doing in the case of Deca.

CUFFE: This is something that's been found in breast milk though. That is a very clear example of how it is getting into the environment and into human beings. So surely at that point it would be quite legitimate to say this should be withdrawn?

CHURCH: Everything, but everything is a chemical. Just because a chemical occurs in a biological system – breast milk or blood or bear fat in the Arctic or whatever – does not necessarily mean there's a problem. So what you have to do then is look at that substance quite carefully and see if it is having an effect on the person or the animal or the plant that you find it in. With Deca, we haven't found that evidence.

CUFFE: These arguments are about to be played out on a much wider scale in Europe, where new Commissioners and Members of Parliament from 25 member states are getting to grips with ambitious proposals for legislation.

VAMPIRE MUSIC

CUFFE: After raising their profile by testing the blood of Ministers and MEPs, WWF campaigners are continuing on the same theme.

ACTUALITY OF PARADE

MAN: We're parading in the EU quarter of Brussels. We're all dressed up as vampires with black cloaks, big teeth.

WOMAN: I'm here at today's protest because my friends and myself are very angry and very concerned that what we are getting is highly contaminated and it's just not good enough. The vampire needs quality product.

CUFFE: So far the Green lobby has the best gags. But it's growing impatient with the slow pace of the proposed legislation.

SCOLA: The European Union has proposed a new law that should identify and phase out the worst chemicals. The European Commission published that proposal exactly a year ago, a year ago today, and yet there's been no decision made by any of the European Union bodies. The Parliament hasn't even begun debating it properly, and so we're here really to mark that anniversary and to show that, frankly, even the living dead are losing their patience.

CUFFE: The proposed law is called REACH, which stands for Registration, Evaluation and Authorisation of Chemicals. It will require the industry to provide detailed information on thousands of chemicals in everyday use, and prove that they are safe. Speaking for the British government, Colin Church is an enthusiastic proponent.

CHURCH: We talk about 30,000 chemicals being produced in significant volumes and significant quantities, but even that's an estimate, it's not certain, we don't have a clear list of these 30,000 chemicals. We don't know how they're used, we don't know what their properties are in many of these cases. We know that, on the whole, companies try to use them safely, but sometimes companies don't realise down the supply chain that they're using chemicals and won't necessarily therefore be thinking about how do I handle these chemicals safely? The proposed legislation, REACH, means collecting information about all of these chemicals that are produced in significant quantities. Part of the reason it's difficult to put together is that the burden is on the regulatory authorities to prove beyond reasonable doubt that there is a problem. What REACH will do is put the emphasis on the producer of the chemical, who knows the chemical better than we do clearly, because they've been working with it for a period of time, puts the emphasis on that producer to demonstrate a degree of safety with their chemical, a degree of understanding of its impact on the environment and human health. It will be in their interests to do that properly, because we will have checks in place to make sure that happens, but also as quickly as possible. It's a big challenge and it's a very important challenge for this country and for the European Union as a whole.

CUFFE: The biggest challenge is getting manufacturers on board. REACH has put the frighteners on the European chemical industry council, which sees itself losing out against unregulated competitors. Its spokesman on trade and competitiveness is Rene van Sloten.

Under REACH you would only remove chemicals that were shown to be of potential harm. Those chemicals shouldn't be on the market in the first place.

VAN SLOTEN: The effect of REACH will not be limited to the chemicals that we want to regulate, and we will see that many chemicals will disappear from the market that do not pose any health or environmental risk at all. They will simply disappear from the market because it's economically not viable to continue their production, and the effects that this is causing on the economy as a whole is considerable. Some studies were made in Germany and France that suggest the worst case a million people could lose their job as a consequence of the introduction of REACH. Now again I think it is not an exact science to predict what will happen, but my question is, can Europe, under the present economic climate, afford to lose one single job? You should also

VAN SLOTEN cont: understand that the small and medium sized enterprise that is producing in Italy or in the UK, they are here with producers from China, from India from the United States that are not subject to a REACH-type system. Here every euro sent in the competition can count.

CUFFE: But of course environmentalists say that you're exaggerating the costs and the impact and that there really is no reason for these small companies, small or medium sized companies to disappear.

VAN SLOTEN: The costs are not exaggerated and there is overall agreement to 7 billion euros. The profit situation of many small, medium sized enterprises in the industry is really very vulnerable.

CUFFE: Colin Church of DEFRA admits that the legislation will be costly for manufacturers and suppliers, but thinks they can afford it.

CHURCH: It is true that we've had a situation for a long time where chemical companies have been able to produce their substances and to market them and to make money from them without having to have this kind of requirement for better understanding of their substances, and that is the aim of REACH, to stop that from happening, to move to a situation where we do understand these things. And it seems to us entirely right that so long as the burden is kept to a minimum, that is a burden that's rightly borne by the industry who makes their money out of these substances.

CUFFE: But the cost is going to be immense and the industry are saying that that is too much of a burden on them and may make them less competitive.

CHURCH: It's true to say that there will be a cost associated with REACH. That is clearly the case. If we can encourage or push companies to share information and sharing the cost up front, that would massively reduce potential burdens. We think that the cost that in the end will be borne by industry can be kept to quite a low minimum compared to some of the figures that have been bandied around.

CUFFE: The arguments about registering chemicals and collecting data are trivial compared to the row about the next stage of REACH – deciding what action to take once a chemical has been found to pose a risk. Each of the 25 member states has a different perspective, depending on the size of its chemical industry, its Green credentials or whether or not it's had experience of a chemical disaster. For Britain, Colin Church has to negotiate with them all.

CHURCH: You have differences about how far the process should go. The A in REACH stands for Authorisation, and the idea here is that certain categories of chemicals are, by their very nature, so dangerous, so hazardous that one should take much more stringent action around them. And the UK position is that if a chemical meets the criteria that we've all discussed, that should mean eventual phase-out of that chemical from use. Not everybody shares that view. Some countries think that you can control these chemicals such that they don't get into the environment and there's never a problem and that that can continue indefinitely. Other countries think that if it's subject to authorisation, that should mean a very very quick ban, and we're talking a matter of a very few years and then a total ban. So there are lots of differences of opinion within that context.

CUFFE: One of the biggest sticking points in the debate on REACH will be about who makes the final decision as to whether something is safe and on what grounds. And there's one group of chemicals that throw this difficulty into sharp relief. They're called phthalates, sometimes nicknamed gender-benders, because they've been shown to disrupt the sexual development of some animals. And they're the centre of a heated row in Europe. Phthalates are used to make plastics soft and flexible and they've been used in everything from food wrapping to medical equipment. They are of interest to one of Britain's leading experts on male fertility, Professor Richard Sharpe.

SHARPE: My interests are in male reproductive disorders, and the evidence that these may be increasing is really quite substantial, and the evidence that young males in particular are more prone to reproductive health disorders and low sperm counts, risk of testicular cancer is really getting more and more convincing by the day. And we know that they must have an environmental or lifestyle cause, because they are recent developments, there's not a genetic cause for these. So yes, we would therefore say that chemicals might contribute to that.

CUFFE: Phthalates first came into the frame about five years ago, when research showed their effects on the development of the male foetus in laboratory rats. Since then Professor Sharpe has been carrying out further studies at the Medical Research Council's laboratory in Edinburgh.

SHARPE: We know that if you expose pregnant laboratory animals during the period when the male foetus is sexually differentiating, becoming a male, that you interfere with the production of hormones by the testes of the foetus, which are what actually brings about the masculinisation and successful development of its reproductive system. So in other words they're laying the groundwork for future normal reproductive health and fertility. So you interfere with that and the spectrum of disorders that result in these animals is remarkably similar to those that we are interested in the human population, and for which we have evidence of an increase in incidence. Now I have to say straightaway that the doses or the level of exposure of phthalates that are used in the laboratory animal studies to induce these effects are far in excess of anything that we think that humans are exposed to, so you can't immediately say, 'Oh yes, well this is proof.' People have started now to look at much lower doses and that's an ongoing business, so I don't think we have a final conclusion yet. But certainly we know that lower levels of exposure can still induce abnormalities, albeit at a much lower frequency.

CUFFE: Just because you're seeing it in laboratory animals, in rats for instance, does that mean that it will have the same effect in humans?

SHARPE: We don't yet have any direct proof that phthalates will induce in humans any of the effects that we see in laboratory animals, and that's very much an absence of evidence situation rather than an evidence of absence, but that's where we're at.

CUFFE: The plastics industry, which has relied on phthalates for many years, is understandably concerned about any evidence suggesting potential harm. But their spokesman in Europe, David Edgar, says he hasn't heard anything that convinces him yet.

EDGAR: In the case of phthalates, you have to remember that they have been used for more than fifty years, and during that time there has not been one single known case anywhere of anyone having been harmed as a result of their use. To the contrary, they have contributed very greatly to the much healthier environment, the longer lives we're living and everything else.

CUFFE: Again there seems to be a difference of opinion scientifically here, because we have spoken to a leading medical researcher in the field who says that he is concerned about the reproductive effects of phthalates, and if there is a possibility of harm, then surely it is better to take a precautionary approach?

EDGAR: Again I'm sorry, I come back to the levels at which you have seen that possibility, okay? You know, when you are talking about the amounts that these rodents were exposed to to see some sorts of effects in the first place, humans would not be exposed to those sort of levels. Also let's not forget, these risk assessments that we're talking about, those levels and so on are fully taken into account. I think it's a pretty ridiculous political decision if you then make a decision to ban something when you know that people are not going to be exposed to that level. We would end up potentially banning all chemicals on that basis.

ACTUALITY AT EUROPEAN PARLIAMENT

CUFFE: This is the European Parliament in Brussels –they call it Caprices des Dieux after a French cheese of a similarly odd shape. But it's what they see as the caprice of politicians that worries industrialists. In the battle for political votes, they fear they may be losing out to the environmental groups, who know just how to tap into public concerns. This week Axel Singhoven, who advises the Green MEPs, is cock-a-hoop because his long-running campaign to get phthalates permanently banned from some children's toys looks as if it's paid off.

ACTUALITY IN TOY SHOP

CUFFE: A lot of the baby toys in this shop are soft and bendy and good enough to chew. In 1999, the European Commission put an emergency ban on the phthalates that were of most concern, forcing manufacturers to take them out of toys that were meant to be put in the mouth. But there are other toys here which may still contain the chemical, and Axel Singhoven wants to take them home and test them. How old do you think this is for? I mean, it would be for young children presumably?

SINGHOVEN: It would be for young children and they would use it in the bath tub ...

CUFFE: Star shapes and fish shapes, they're very sweet and brightly coloured. And a little frog here. Oh, that's the smell ...

SINGHOVEN: The smell ...

CUFFE: It's very strong.

SINGHOVEN: The smell of phthalates.

CUFFE: So what harm might that be doing to a baby that sucked it?

SINGHOVEN: Well, the baby would be exposed to chemicals. It will have had an unnecessary exposure to a hazardous chemical, which may add up over time and maybe twenty or thirty years later create problems. But of course then nobody will ever be able to say this was because of that toy, and that is the difficulty of creating this cause/effect relationship is what industry plays on by saying you cannot prove that there is any harm. No, I cannot prove that there is a direct harm to the child's health, but I know that children will ingest them, and why should I take that risk?

CUFFE: When the EC decided to impose its temporary ban on phthalates in baby toys, it commissioned a panel of experts to carry out a risk assessment on the one that's most widely used. The experts were confronted with a difference of scientific opinion about the dose of phthalates that could have an effect on animals in the

CUFFE cont: lab. One study set it much higher than another and this is the one they chose to believe. Then another EC committee, set up to monitor their risk assessment, chose the lower figure – the more precautionary approach - and overruled them. Tim Edgar, of the Plasticisers Association, is furious because he says the proposed ban goes against the weight of scientific evidence.

EDGAR: We're very disappointed that despite this there is now a proposal going through that there should be a ban on its use in children's toys for children under the age of three years old, and frankly we don't believe that this is what the science tells us at all.

CUFFE: But where there are two different opinions like this, and where children's safety is at stake, surely it's better to go for the more precautionary approach to this, as in fact the Commission has done?

EDGAR: You have to look at, though, what would be the real precautionary approach. There has to be a stage where you say, no, the scientific experts have to come to an agreement, and the real agreement was at this level where they could be safely used.

CUFFE: According to the European Chemical Industry Council, this decision on phthalates in children's toys shows that decisions under REACH will be based on politics, not science. Tim Edgar thinks the European Commission acted too hastily when it imposed a temporary ban and can't be seen to change its mind now. Are you really suggesting that the Commission might make a ban that is fairly draconian in its effects simply to save face?

EDGAR: No. What I'm saying is that the Commission actually should be, and the way that we need to move forward with all chemicals, frankly, has to be based on science. It must not be based on emotion. If it's scientifically proven that there isn't a risk there, then substances should be allowed to be used, and that's fundamental to the success of the REACH process as we move forward.

CUFFE: The spokesman for the EC committee that has proposed the ban, is Michael Mann. He says the decision is in the best interests of the public.

Why did the Commission decide to introduce this ban, despite the fact that a risk assessment had said there was no problem?

MANN: We have in Europe what we call the precautionary principle, where we have to err on the side of caution. There was no clear-cut science that said there was absolutely no risk, in our view. We felt that there was a risk and therefore we felt we had to act.

CUFFE: There was already a temporary ban on phthalates for toys for children under three. It would have been perhaps hard for the Commission to turn round and say, 'Well actually that ban was unnecessary.' Were you just trying to save face really?

MANN: We're not here to save face. We're here to do a job. Obviously once the risk assessment was done, it was referred to a European Scientific Committee, the Committee on Toxicology, which gave its assessment of the research that had been done, and they erred on the side of caution and they took the view that we should be erring on the side of legislation rather than not legislation, so that is obviously leading European experts on the subject and therefore we have to take good note of what they're telling us. Remember also that it's not the European Commission that takes the decisions on these things. We're not actually the legislators. Those legislators felt also that they could support our proposal, so obviously there is an element of politics involved here as well.

CUFFE: The industry say this is an abuse of the precautionary principle.

MANN: We have to balance the need to protect European citizens with the need to make sure that European industry can operate, but you know, we've also had bad experiences in the last few years. Remember the BSE crisis, the mad cow disease crisis? Since then there has been a lot of sensitivity in Europe in the capital

CUFFE: Here in M&S, parents are already shopping for Christmas. Today's four year olds apparently want motifs showing Harry Potter or cartoon characters on their t-shirts and pyjamas. These are normally made with soft plastic containing the controversial phthalates. But Mike Barry, the company's environmental adviser, has decided to withdraw the chemical from children's clothes.

BARRY: Behind the scenes we've worked to take out three specific chemicals of concern and substitute them with a safer chemistry.

CUFFE: It still feels the same, doesn't it? Slightly rubbery texture.

BARRY: These chemicals were in widespread use in the manufacture of children's clothing, particularly with a plastic motif on many children's items. And we took a view eighteen months ago that this was a chemistry that we wanted to get out of, again for precautionary reasons.

CUFFE: And what made you think that there could be any risk from having phthalates in children's clothing?

BARRY: I don't think there was any specific concern about exposure while in general use. Our concern was much wider than that. The use of these chemicals wherever the clothing had been manufactured, their release while they're being used and their release when they're being disposed of. So we're looking at the total life cycle impact rather than any specific concerns about consumer safety.

CUFFE: So M&S has made that decision, which has been costly and complex, even though there's no conclusive scientific evidence to back it up. It's been a purely business-based decision.

BARRY: We're never going to be in the position that we were in the past, 1960s, 1970s, when there was one omni-important voice that could pronounce a chemical was safe or it wasn't. Those days are gone. The future is about shades of grey.

