

# STATES OF JERSEY

## Environment Scrutiny Panel Radon Review

**FRIDAY, 7TH MARCH 2014**

**Panel:**

Deputy J.H. Young of St. Brelade (Chairman)

Deputy S.G. Luce of St. Martin (Vice-Chairman)

Connétable P.J. Rondel of St. John

Deputy J.M. Le Bailly of St. Mary

Ms. J. Bradley (Adviser, Public Health England [PHE] Centre for Radiation, Chemical and Environmental Hazards)

**Witnesses:**

Deputy R.C. Duhamel of St. Saviour (The Minister for Planning and Environment)

Director, Building Control

[11:30]

**Deputy J.H. Young of St. Brelade (Chairman):**

Welcome to this morning's Scrutiny hearing with the Minister for Planning and Environment and his senior officer. In a minute, I will ask them to introduce themselves. Welcome to members of the public and the media. This hearing is the first of 2 hearings where we are carrying out a review of the Island's measures to deal with radon gas. Radon gas is of course a naturally-occurring material. I will introduce the members of the panel. John Young, Chairman of the Environment Scrutiny Panel.

**Deputy J.H. Young:**

We have with us Jane Bradley - I will get this right - from the PHE Centre for...

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

Radiation, Chemical and Environmental Hazards.

**Deputy J.H. Young:**

Obviously Jane is kindly advising the Scrutiny Panel as an acknowledged expert in this field. Minister, if you would like, for the record, to introduce yourself.

**Deputy J.H. Young:**

Thank you very much. We have set aside, by the way, until 1.00 p.m. for the hearing. If we feel we have covered the material earlier, we will be open to closing earlier, but I think that is the time slot. I want to open by some very high-level questions to you, Minister. Minister, radon is a natural material, a natural gas, which is present in the environment everywhere, as it were, though the prevalence differs in different places. What do you see your responsibility as, as Minister for the Environment in the Island's responses to how we deal with this radon issue?

**The Minister for Planning and Environment:**

Working with the environmental health authorities in conjunction with the reports and the strategy that we set out for air quality and inside the building bylaw regulations to ensure that buildings do not contain hazards that can cause people health risks.

**Deputy J.H. Young:**

Do you see, Minister, this is an issue that only relates to buildings?

**The Minister for Planning and Environment:**

No, it does not just relate to buildings. It relates to services that are within buildings and indeed from external sources as well.

**Deputy J.H. Young:**

How significant do you see the issue of radon in the environment is relative to other...

**The Minister for Planning and Environment:**

There have been other reports which have kind of downplayed the significance or potential significance of hazards of radon. In general terms, I think it is a 2-tier problem in relation to buildings, and in particular the newer buildings are covered by upgraded building bylaws which are generally buildings with a different construction method and have the opportunity to put in membranes to confine the gases, or indeed air sumps and pumps to get adequate ventilation. Most of that really relates to new buildings and has been operated for the last 13 or 14 years or

thereabouts. The hazards perhaps more largely pertain to the older style kind of granite buildings with the dirt floors and flagstones and things like that, which generally were not constructed with the same building techniques that modern buildings are constructed with. There is a little bit of a dichotomy, in that it is the public health that is of interest here and obviously with the more modern buildings and more people on lower incomes or whatever living in those more modern buildings, I think potentially the problems only apply to those who are wealthy enough to live in what is deemed to be more historic houses and they probably have got more funds available of their own accord to deal with any potential problems, should they be worried about it. So in terms of the public health problem, I think we are generally doing pretty much everything that is required in order to look after the major funding for health interests of the population.

**Deputy J.H. Young:**

So you consider you are doing enough to make people aware of these...

**The Minister for Planning and Environment:**

I think we are, generally. Obviously there is always kind of ongoing discussions as to the hazards as the science develops and I think one thing perhaps that could be looked at is perhaps the radon in water, which we will probably come to at a later stage. In relation to the provision of water sources on the Island, not everybody draws their water from central reservoir sources, which is exposed to the air for a longer period of time, so the radon gases have a longer period to kind of break down. If indeed you are drawing the water mainly from ground sources through a borehole or a well and you do not take advantage to store your water in a way that allows the radon gases to escape, then perhaps there might be a greater kind of potential to ingest the gases in some shape or form, either through cooking or through showering or bathing. But generally, from the stuff that has come through to the department - I think Mo obviously will agree with me or disagree, as the case may be - I think we are on top of the potential problem, and until the health authorities tell us that the levels that we kind of intervene at have gone down a lot in terms of the cut-off point, I think we are generally doing enough to keep the matter under control.

**Deputy J.H. Young:**

We do want to talk about water a bit, but I want to ask you a policy question first. Do you not have any legal responsibilities as regarding under your laws, including the water law, for example?

**The Minister for Planning and Environment:**

I think there are, but largely it is one of these cross-over interests with another department, and there are health issues due to breathing in particular gases, and that is not necessarily a single issue for my department.

**Deputy J.H. Young:**

Okay. Look, one other question. So your legal responsibilities, to sum up what you have said, are dealing with buildings through your powers and the building bylaws; you do not intervene in water quality in terms of radon in water?

**The Minister for Planning and Environment:**

Not at present to a level that might be advised, if necessary.

**Deputy J.H. Young:**

Any other area of laws, or is that it? Any other area of laws you are involved with?

**The Minister for Planning and Environment:**

There is the *Air Quality Report* strategy that we led, kind of outlined a programme of work which is going to be added to at a later stage to take into account air quality for internal spaces, and that work is ongoing.

**Deputy J.H. Young:**

What is your legal responsibility in that work?

**The Minister for Planning and Environment:**

The legal responsibility I think is that we are leading it and we have agreed to work within both departments' sub-sets of laws, in the building bylaw regulations or on the environmental health side.

**Deputy J.H. Young:**

Right, but you do not have any laws to enable you to control air quality, for example?

**The Minister for Planning and Environment:**

I do not think we have any laws that we could stop people from living in a room if they choose to live in it.

**Deputy J.H. Young:**

Okay, since you have raised water, I am going to turn now to Deputy Luce and pick up the issue of water and we will come back to buildings in a moment.

**The Deputy of St. Martin:**

Yes, before we start, there is just one thing you said at the outset, Minister, that you alluded to the fact that you concluded that people who live in houses which predate radon protection have got more money. Could you expand on that and how you come to that conclusion?

**The Minister for Planning and Environment:**

I did not say that. I said that the likelihood of people being exposed to not having radon protective measures in houses are probably those who are more affluent who are living in converted farmhouses.

**The Deputy of St. Martin:**

But you associate granite in the walls as a major source of radon?

**The Minister for Planning and Environment:**

It is not just granite in the walls, it is the fact that there are different practices, and I alluded to not having concrete pads or foundations, and generally a lot of the buildings, and in particular farm buildings, had a dirt floor and maybe a wooden floor above the top and no other measures.

**The Deputy of St. Martin:**

But it would not have only been farm buildings, Minister.

**The Minister for Planning and Environment:**

No, no, no.

**Deputy J.H. Young:**

We will come back to buildings.

**The Deputy of St. Martin:**

Okay. In 2012, Val Cameron<sup>1</sup> wrote us a report where she stated that she had raised the issue of radon in drinking water with the Environment Department and I just wondered, Minister, if you were aware of any work that has been done since the second half of 2012 on that issue.

**The Minister for Planning and Environment:**

Since the second half of 2012 I do not think much has been done, no.

**The Deputy of St. Martin:**

Are you aware of any water that has been tested for radon levels at all?

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<sup>1</sup> Then Head of Health Protection Services

**The Minister for Planning and Environment:**

No, I do not think any work has been started in that respect.

**The Deputy of St. Martin:**

I say that because in a most recent report, we note that the European Union are currently proposing a new directive for radon in water and they are stating that monitoring of water for radon is not required where you are satisfied on the basis that other monitoring levels are well under the accepted parameters, but of course you have to test first to know where your levels are, so I was just inquiring to see whether any tests had been done to try to work out a basic level.

**The Minister for Planning and Environment:**

It is one of these issues that again is a bit of a split responsibility. If the water that is being used within a building has been primarily supplied by the waterworks company, they do have their own testing regimes which we have sight of on a regular basis for testing for kind of pesticides and other things within the water. If indeed from Val Cameron's report she is suggesting that perhaps radon should be included on the testing list for the waterworks company, then that would be something that I would have thought the waterworks company would have advised us about. To my knowledge, I do not think any work is done in that regard as yet, but if indeed the European Union are coming forward with tighter restrictions and regulations or advice to kind of protect people in a greater fashion, then that obviously will be an area that we would be happy to promote.

**The Deputy of St. Martin:**

Where does the jurisdiction lie, Minister, with boreholes, because obviously it would seem logical that if there is going to be a problem with radon in water, it is more likely to come out of borehole water than it is out of reservoirs. Is it going to be the responsibility of the landowner to test and to treat or is that something that your department would legislate on?<sup>2</sup>

**The Minister for Planning and Environment:**

I think it could be. In other jurisdictions, there is an advisory capacity by the environment authorities and reference is made to radon testing kits and things for people to either purchase from the relevant department or from other local water authorities in order to run the tests themselves. As I say, it is pretty early days as yet, and until I know a little bit more about what is coming out from the European Community in relation to this, I am not quite in a position to be acting in the capacity that perhaps you are expecting me to.

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<sup>2</sup> Environmental Protection comment: 'There is no Jersey equivalent of the Private Water Supplies Regulations 2009, which regulates and defines the "wholesomeness" of water intended for human consumption in England. Provisions within the Water (Jersey) Law 1972 enable the regulation of the quality of water supplied by Jersey Water using the same definition of "wholesomeness". The definition does not include radon specifically and indeed excludes radon and radon decay products from its definition of 'total indicative dose (for radioactivity)'.'

**The Deputy of St. Martin:**

What would your gut feeling be, Minister, if I said to you that in this day and age, we see a lot more plumbing in new builds where the system is pressurised throughout and we do not have the old header tank system, and you have already said this morning, and quite rightly, that one way of getting rid of radon would be to go back to the old system. Is that something that you think that we might have to adopt in bylaws even in the future with...

**The Minister for Planning and Environment:**

Yes, it could well be, but the revision of bylaws, obviously it is an ongoing process and in a lot of respects, it is led by health considerations from E.U. (European Union) legislators or from the U.K. (United Kingdom) or whatever.

**The Deputy of St. Martin:**

So it would not be an issue for your department to legislate through the bylaws regulations to state that a certain type of plumbing system would have to be used?

**The Minister for Planning and Environment:**

It might well be that we refer to it and suggest that the relevant authorities that deal with drinking and bathing water are satisfied that standards are being upheld or encouraged in order to minimise any potential damage that water usage in that regard might bring about. No, it is the right of an individual owner of a borehole, once they have drawn the water, to drink it and to do with it whatever they wish.

**The Deputy of St. Martin:**

Do you have any idea how many registered boreholes there are for private dwellings on the Island?

**The Minister for Planning and Environment:**

I had that thing at my fingertips...

**Director, Building Control:**

We have got some 3,388.

**The Deputy of St. Martin:**

Any idea what percentage that might be of Island dwellings?

**Director, Building Control:**

It is about 9.5 per cent.

**The Deputy of St. Martin:**

So we are looking roughly 10 per cent of the Island is on borehole, so it is not a super-significant number.

**The Minister for Planning and Environment:**

We have to be careful though, because the mere fact that you are on a borehole does not necessarily imply that you are at a greater risk.

**The Deputy of St. Martin:**

Yes, you are quite right.

**The Minister for Planning and Environment:**

In fact, in a lot of cases - the planners will correct me if I am wrong - the older planning techniques of taking water and storing it in a tank is generally still prevalent in a lot of these buildings.

[11:45]

**The Deputy of St. Martin:**

Yes, but I am aware that where space is tight, architects and developers will want to cut it and use every available space possible and header tanks take up space.

**The Minister for Planning and Environment:**

Yes, it could well be an issue, particularly in showers and bathing, and to a lesser extent in any waters that are used for cooking, albeit that if you are cooking, boiling vegetables and things, the act of boiling will drive off the gases at a greater rate than just drinking it kind of untreated.

**The Deputy of St. Martin:**

I think the other thing we must stress obviously at this stage is that the amount of radon in water, even if it is there, is small, 10 per cent maybe of the air, so that while we are discussing water, it is not of major significance in the big scheme of radon.

**The Minister for Planning and Environment:**

The levels that are being suggested before action is required are substantially higher for gases in water than obviously for gases that are escaping out of the soil.

**Deputy J.H. Young:**



Can we check that, please? What levels are you talking about, Minister? Can you clarify your answer?

**The Minister for Planning and Environment:**

I think they are the order of twice the... I think it is 100 per cubic metre is the...

**The Deputy of St. Martin:**

Per cubic litre.

**The Minister for Planning and Environment:**

For water, it is double.

**Deputy J.H. Young:**

Can I ask our expert adviser to comment on that, please, just to...

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

Sorry, I did not catch the beginning of the comment.

**Deputy J.H. Young:**

Sorry, Minister, could you just repeat? The Minister said that he thought the standards in water were different from what they are in the air and that there was a higher limit in water, and he referred to 100...

**The Minister for Planning and Environment:**

Sorry, they are lower.

**Deputy J.H. Young:**

A lower limit?

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

Yes, it is per litre in water and...

**The Deputy of St. Martin:**

It is per cubic metre in air.

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

... per cubic metre in air, yes<sup>3</sup>.

**Deputy J.H. Young:**

Sorry to divert. Can we continue? Phil wants to get in, yes.

**The Deputy of St. Martin:**

Phil has got some questions.

**The Connétable of St. John:**

You mentioned the water company and the testing regimes within the water company. Given that certain times of the year the water company draw an awful lot of salt water and use reverse osmosis in a desalination plant and the sea obviously contains considerable amounts of radon within it, once that water has been turned into drinking water and it is then pumped into our reservoirs, what monitoring is there done to make sure that the radon has been removed at the time of desalination<sup>4</sup>?

**The Minister for Planning and Environment:**

I could not answer that question on behalf of the waterworks company, but I assume they do have fairly tight concerns as to how the 2 waters kind of mix. There is a mixing regime, and if you go back a number of years, it was alleged that we had problems with the alkaline aggregate reaction in some of the reservoirs, notably Val de la Mare, which were caused by the waters that were being mixed from the desalination plant at levels that were contributing to the concrete problems.

**The Connétable of St. John:**

Yes, I am aware that we have a blending across the Island in our reservoirs, but you said there was this working relationship with your officers and the department.

**The Minister for Planning and Environment:**

Yes, there is a working relationship.

**The Connétable of St. John:**

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<sup>3</sup>Environmental Protection comment: The action level in air is 200Bq/m<sup>3</sup>. There is a draft European Commission recommendation on radon in drinking water supplies of 100 Bq/l for public supplies and an action level of 1000 Bq/l for non-commercial private supplies.

<sup>4</sup>Environmental Protection comment: 'The desalination plant is currently used sparingly given the cost of running the plant and indeed it is generally used at a frequency of once in every five year period. Radon is present in seawater at a concentration of 4\*10<sup>-12</sup> mg/l. The reverse osmosis process itself demineralises the water and removes salts. Radon is a far bigger atom than for example sodium, which would imply that it would also be removed in this process. Notwithstanding, any demineralised water will be pumped into a storage reservoir where it is blended with raw waters prior to it going through the treatment process before it reaches public supply. There is ample opportunity for any residual radon to be gassed off. Consequently there will be no monitoring of radon exiting the desalination plant.'

Okay, but is this an item that was raised at your meetings?

**The Minister for Planning and Environment:**

I do not think it has been raised as yet. I do not have a list of the items that the waterworks company test for in front of me at the moment, but I think maybe that is a question you could address to them. I do not think, from my memory, that radon is one of the things that they check for, but if indeed through E.U. legislation people are becoming more concerned as to the potential quantities of these gases in the waters, then I have got no doubt that under the laws that govern water provision to the public and the public health laws and things like that that if it is needed to be tested for, the waterworks company will be doing that testing and will be in a position to report whether or not it is being done to the levels and the limits that are being suggested as the safe ones through the law change<sup>5</sup>.

**Deputy J.H. Young:**

Minister, where does responsibility sit for this? Does it sit with you? Does it sit with the Minister for Health or does it sit with the water company?

**The Minister for Planning and Environment:**

That is a good question. It depends at what level you are considering it is an issue. Personally, I think there is a wider environmental remit that sits with my ministry to, as far as possible, encourage kind of the wise use of resources and improvements in terms of the usage of those resources, whether it be building of houses or anything or cars or this, that and the other. I think those kind of interests are shared, when you come down to regulations, with other departments.

**Deputy J.H. Young:**

So you do not have regulatory responsibility for mains water supply?

**The Minister for Planning and Environment:**

No, not in the quality of the provision.

**Deputy J.H. Young:**

You do not?

**The Minister for Planning and Environment:**

I do not think so, no<sup>6</sup>.

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<sup>5</sup> Environmental Protection comment: 'Jersey Water does not test specifically for radon, given that most (97%) of its water is derived from surface waters which will have ample opportunity to gas off any entrained radon.'

<sup>6</sup> It was subsequently confirmed by Environmental Protection that the Minister has regulatory responsibility for the quality of water supplied by the company for domestic or non-domestic purposes.

**Deputy J.H. Young:**

Perhaps, Minister, you could arrange to make inquiries. Obviously we had issued a note to your team for this, asking that they come along with this information. If you could let us have what regulation covers for water supply and what does not.

**The Minister for Planning and Environment:**

As I said, there is a general interest in that the water supplied by the waterworks company is deemed to be wholesome and potable. In that regard, that is why the testing that takes place with the waterworks company in relation to any agricultural run-offs or any other potential contamination that comes from the external environment into the water source is an issue.

**Deputy J.H. Young:**

Okay. Steve, do you want to get back in?

**The Deputy of St. Martin:**

All I would say is I think we have got to appreciate there is a number of different establishments at work here, but one of our recommendations, Minister, might be that the States should consider a pilot programme to determine if radon in water is a significant source of exposure in homes and workplaces. I suppose you would agree with that, and it is just a question of working through the semantics as to who is responsible and how we do it.

**The Connétable of St. John:**

Moving on slightly to grey water, given we have men working in underground caverns and the like across the Island, and anywhere where people work in drains and everything you have a build-up of radon, what have you got within your regime of controls to make sure that these areas where our staff are working - and the public are working or have access to - are monitored?

**The Minister for Planning and Environment:**

I am not sure that we have got anything. That would come under health and safety, would it not?

**Director, Building Control:**

Yes, so it all would come under health and safety at work legislation rather than planning.

**Deputy J.H. Young:**

Right. We are meeting the inspectors this afternoon, so we will cover that. Now, can I turn to our adviser? Obviously we have had a little discussion about water. Are there any particular points that you would like to bring out for us in questions?

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

One of the things that I think has not come out particularly is that the water law, does that cover the individual boreholes or is it just for the water company?

**The Minister for Planning and Environment:**

In what regard?

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

Does the law itself cover all water supplies including those that are provided on private properties rather than just ones which are provided by the public water supplier? I think it is just Jersey Water.

**The Minister for Planning and Environment:**

I think generally we have got some kind of restrictive clauses about over-extraction for wells in particular places, but over and beyond that, I am not sure that our particular kind of take on the laws goes as far into the health qualities of the individual water that is being drawn. It is down to the responsibility, I think, of the individual borehole owner to determine whether or not his water is fit to drink and he takes the risk on his own back.

**The Deputy of St. Martin:**

I think I tend to agree with that. I do not think you can legislate for somebody... if you want to go and drink out of a puddle in the middle of your own yard, that is up to you.

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

I was just wondering whether the quality standards that you have also applied as a guidance to householders.

**The Minister for Planning and Environment:**

I think it is probably more applicable for water that is generally supplied by the waterworks company rather than for individuals who go out and supply themselves.

**Deputy J.H. Young:**

We are seeing the Minister for Health this afternoon. We will ask them the same questions about what they expect about standards of drinking water and so on, so I think now with that, I would like to move on. We want to come back to the question of radon within buildings. My colleagues, the Connétable and Deputy Le Bailly, have both got an interest in this area. Who wants to lead? John, do you want to go?

**The Deputy of St. Mary:**

Could the Minister tell me, is there any ongoing monitoring on the properties which we used to produce the report with regard to levels that are actually in that report?

**The Minister for Planning and Environment:**

I think again - and Mo will probably kind of fill in a little bit - the department, in situations where we think it will be of benefit to that property to put in a sump or whatever to ventilate their basement and things, equipment is obviously installed to run those checks. So it is bit like smoke alarms, so we encourage the take-up, where it is deemed to be necessary, to take up those appliances to measure. There are difficulties that might ensue, but I do not think we follow it up and have a radon police team or whatever go around checking up on whether or not people are either operating those pumps or testing measures. It is down to them to decide whether or not they wish to use them.

**Deputy J.H. Young:**

Who is "them"?

**The Minister for Planning and Environment:**

The home owner. As I said, we have got similar things with smoke alarms, so although the State can kind of up to a point insist that, as far as possible, people put smoke alarms into their buildings for their own safety, we cannot and we do not generally go around ensuring that everybody has kind of kept their batteries tip-top and that the appliances are working. It is up to the responsibility of the owner.

**Deputy J.H. Young:**

What about tenants, Minister? What about tenants who do not own a...

**The Minister for Planning and Environment:**

Tenants are slightly different, and that would be covered, I would have thought, by the housing and tenancy agreement which might, for common areas, insist on maintenance of smoke alarms for various corridors that are for public access.

**Deputy J.H. Young:**

I meant radon for tenants.

**The Minister for Planning and Environment:**

Radon?

**Deputy J.H. Young:**

Yes. What control has a tenant got over radon levels in their building?

**The Minister for Planning and Environment:**

That would be down to any tenancy agreements that are drawn up by the person who is renting the house.

**Deputy J.H. Young:**

Okay. Sorry to interrupt you, carry on.

**The Deputy of St. Mary:**

Did you make any recommendations to the properties with high levels of radon for the owners?

**The Minister for Planning and Environment:**

We have got a list somewhere.

**Director, Building Control:**

Yes, the testing done by Health in 2012 identified properties above the recommended action level, and as I understand it, Health contacted all those people and gave advice on how to remediate that.

**The Deputy of St. Mary:**

Did those people take up the recommendation?

**Director, Building Control:**

I do not know that.

**The Deputy of St. Mary:**

So we have got no ongoing monitoring based on those high levels where the people...

**Director, Building Control:**

On those properties that were tested?

**The Deputy of St. Mary:**

Yes.

**Director, Building Control:**

As I say, the information I have on those, they were very old houses - most of them were 50 to 100 years old - that showed the high levels. I understand from the discussions with Health, who instigated that testing regime, that they have been in contact with all of those householders and given them every help to deal with the problem.

**The Deputy of St. Martin:**

It is your understanding that Health will issue us with the answers this afternoon of how many people took up the offer of assistance?

**Director, Building Control:**

I would expect they would have that information, yes.

**The Connétable of St. John:**

So when was the last survey held by the department into any radon testing?

**Director, Building Control:**

Our department has never done a survey. It has always been done through the Health Department.

**The Connétable of St. John:**

Always, and then the legislation comes up and you...

**Director, Building Control:**

That is right, so it would be the Minister's responsibility under the planning and building law to develop bylaws to deal with issues that we are aware of. Clearly when we get feedback from other departments that standards need to be improved, we would adjust the bylaws to deal with that, and that happened in 1997 for the first time.

**The Connétable of St. John:**

So therefore you will be reactive on the back of another department?

**Director, Building Control:**

On occasions. The Minister will, on occasion, bring forward proposals on his own initiative as well.

**The Deputy of St. Martin:**

Just for clarity, could I just ask, we know you have got bylaws on new buildings as regards radon, but where are we with extensions, refurbishments and conversions? Do we also have an input in those and insist on certain mitigating work?



**Director, Building Control:**

For radon, the standards apply to newly-created dwellings, so that is a change of use on a building from something to a dwelling it would apply to. It applies to extensions to dwellings as well as new-build dwellings.

**Deputy J.H. Young:**

So if you put a small extension on a building that at the moment does not comply with radon, they have got to bring the building up to the standards?

**Director, Building Control:**

Not the building, the building work that is undertaken.

**Deputy J.H. Young:**

The new bit?

**Director, Building Control:**

Yes.

**Deputy J.H. Young:**

But the old bit can stay as it is?

**Director, Building Control:**

That is right. The bylaws are not retrospective. Invariably, any building that comes in with a proposal to do work will not comply with many of the bylaws requirements and to apply the law retrospectively is not something we can do. So if we take this building, for example, and you do an extension here, there would be many things that do not comply with the bylaws. We do not say: "You must now upgrade that building retrospectively."

[12:00]

**The Deputy of St. Martin:**

Do you think it is fair - and I do not know if that is the best word to use - to impose that additional cost on a homeowner when they are putting maybe a small conservatory on the side of their house and you insist on the expense of radon mitigation when the rest of their house that they are living in 95 per cent of the time does not have any?

**Director, Building Control:**

To the conservatory?

**The Deputy of St. Martin:**

Yes.

**Director, Building Control:**

Yes. Most conservatories are exempt from the bylaws, so we would not get involved, but if it was a larger conservatory...

**The Deputy of St. Martin:**

A bad example then. An extension which needs planning permission.

**Director, Building Control:**

I think a householder has got a number of options. They can say: "We have radon tested and there is not a problem here" and that will be sufficient to demonstrate the requirement has been satisfied, but I tend to say that in terms of radon measures, they are not much different to what you require to keep damp out of the building, so it is not an expensive cost and it is a prudent thing to do.

**The Deputy of St. Martin:**

You mentioned radon results. You would like to see more houses being tested for radon?

**Director, Building Control:**

I am fairly confident that the measures we are putting in are effective. We have not done the tests, but I know the U.K. have done tests over a number of years and they are confident if it is done in a competent way, then it will achieve the standard that is required.

**Deputy J.H. Young:**

How do you know these measures are done in practice?

**Director, Building Control:**

Because we do a number of building control site inspections for all works that we are involved in. There is a number of key stages where we need to be notified by law and we inspect at those stages and that gives us an opportunity to see the radon measures and we are confident we see most of them.

**Deputy J.H. Young:**

So you check them all, or the ones that you...

**Director, Building Control:**

Yes. We will see the plans that are approved are quite clear in terms of the measures that need to be provided, so that is communicated to the builder. It is relatively well-established. Most builders will know what to do for radon protective measures in a dwelling, and we see it, we record it. At completion, we check that the sump positions are available to attach the fans if somebody has measurements done and find that they need additional protection, and that is all there. So I am quite confident that our bylaw standards are being achieved on the site, but we do not test it.

**Deputy J.H. Young:**

So you have not tested it to prove it?

**Director, Building Control:**

To test it, it needs to happen over a period of months after the house is occupied, so the bylaws do not have continuing control. At completion, that is as far as we can go.

**The Deputy of St. Martin:**

Would you see that as your job or you see that as Health Protection or coming under another agency?

**Director, Building Control:**

I see it as a choice for the householder, really. They have got measures in. If they are concerned, they can have that extra testing done and act accordingly, so it is about awareness and letting people make their own choices.

**The Minister for Planning and Environment:**

For my way of thinking, it is about the level at which State intervention and public monies are applied in order to maximise any benefits for the greater public, so you are going to be offsetting that against the individual risks, and the State generally does not kind of come in very heavy unless there is a potentially large wider public health problem. People are reluctant, by and large, to have the States Government imposing too many restrictions if indeed it is their choice and wish to do whatever may be disadvantageous to themselves. We see that with smoking.

**Deputy J.H. Young:**

Do you think that people are generally aware of radon gas?

**The Minister for Planning and Environment:**

I think they are, and certainly the Turnbull report and Cameron report a while back certainly gave, I think, a better indication of the overall risks, in particular to the heightened risks for people who smoked, might have had professional occupations that took them into a greater exposure of these gases than the ordinary members of the public. But at the end of the day, before we start applying legislation and regulation, there always has to be a determination as to cost and benefit and the analysis has got to be done in some instances. The State may only go as far as we have done with smoke alarms and suggest that you should have them in your own property, but if you choose not to maintain them and you are caught out and you die through burning or whatever through a fire, it is your choice, up to a point.

**The Deputy of St. Martin:**

But do you think private property owners should be then responsible for their own radon testing?

**The Minister for Planning and Environment:**

I think in most cases they are, unless their private involvement spills over in a wider context to communal areas, as we mentioned earlier.

**Deputy J.H. Young:**

John, do you want to get back in and pick up the thread on these building things?

**The Deputy of St. Mary:**

Basically most of the questions have been answered on that.

**Deputy J.H. Young:**

Okay, Phil?

**The Connétable of St. John:**

I am happy.

**Deputy J.H. Young:**

I want to raise an issue regarding to buildings. Minister, you also have bylaws to do with energy conservation, do you not?

**The Minister for Planning and Environment:**

Yes.

**Deputy J.H. Young:**

Which, if I understand you correctly, you have - in response to practice changes elsewhere - made those requirements more onerous, if I can put it that way, more demanding on people constructing houses, constructing dwellings. Is there not a conflict between the issues of energy efficiency, which generally seems to involve sealing up buildings and having sufficient ventilation, which is the requirement for radon prevention or to prevent the build-up of radon?

**The Minister for Planning and Environment:**

I think there could be, but it really depends to the extent of the mechanical ventilation systems that are running when you have sealed-up units. It is just not the case that people only breathe air until they kind of expire naturally. The mechanical ventilation systems do clean the air and bring in other air from the outside and so I think although potentially there might well be problems with people who are not using their systems properly, it is the same principle as we were discussing previously.

**Deputy J.H. Young:**

Could we hear from Mr. Roscouet on this question? Anecdotally, one hears of people, particularly to older houses, sealing it up, dealing with draughts and so on. Does that not raise potential issues about increased risk of radon build-up in the homes?

**Director, Building Control:**

I think there is a couple of issues here. In terms of new build, I do not think there is a conflict. What we are trying to do with the energy requirement is to make improved energy performance of buildings, and infiltration which is uncontrolled is not conducive to good energy performance. What we are talking about, this is about leaky buildings, buildings that people are just losing heat and air through which is uncontrolled and they cannot do anything about it. What we are saying under the bylaws is: "Let us have controlled ventilation of the required standard." So we are doing away with the uncontrolled elements by sealing up the building, improving construction, but introducing proper ventilation which is controlled and appropriate to the needs of the people in the building, so I think we are not building buildings that do not have sufficient ventilation.

**The Deputy of St. Martin:**

But on what grounds do you think that that sufficient ventilation you talk of clears the radon out of the house?

**Director, Building Control:**

In terms of new build, we are dealing with it in 2 ways. We are putting barriers in to prevent radon ingress in the first instance, and you can then depressurise that through a fan if it is found to still

be above the recommended levels. Then we have ventilation for normal, everyday purposes over and above that.

**The Deputy of St. Martin:**

But has the testing work been done in the U.K., to your knowledge, that proves that that works?

**Director, Building Control:**

In terms of radon measures?

**The Deputy of St. Martin:**

Yes. I am trying to get to this ventilation through the property, and I understand where you are coming from on uncontrolled ventilation, but you are saying smooth air running through the building is sufficient, but has the work been done in the U.K. to prove that it does clear radon, if radon gets into the property in the first place, that is?

**Director, Building Control:**

The ventilation that is provided for everyday use is not intended to clear radon. There is other measures to prevent the radon problem that work together, so if the radon measures have failed, effectively the barrier is not effective, that is where the sub-floor sump to depressurise the floor to deal with the radon at source comes into effect, and the ventilation for the normal living purposes is a separate element.

**The Deputy of St. Martin:**

So as far as you are concerned, the mitigating effect is below the property that stops the radon getting into it should be sufficient, and if the house is sealed up, it should not matter, because the radon should not be getting in?

**Director, Building Control:**

That is right, but the house will have ventilation as well for everyday purposes. You need ventilation to deal with all other issues in terms of air quality in the dwelling and that is provided, and I would suggest in a standard that is far better than we had in the old days.

**The Minister for Planning and Environment:**

What is particularly interesting is that the jury is still out and research is starting to show that the old-fashioned practices, if you like, of opening the windows are possibly the best form of ventilation that you can have. In fact, there were some reports out I read just recently which ironically suggested that the work that was undertaken by Florence Nightingale in the Crimea, in looking after hospital patients, a lot of it was based on opening windows and allowing the inmates to have

open access to wholesome air. That research is being looked at again and there is a body of opinion building up to say there may well be kind of disadvantages to the internal mechanically ventilated tighter household indoor spaces that have to be looked at. This is why a number of years ago when we were doing the *Air Quality Report*, I suggested that a parallel report be undertaken - and that is beginning to be looked at - to look at the quality of indoor airs rather than just the internal airs that the previous report that has been published has delivered.

**Deputy J.H. Young:**

What are you going to do with that then, Minister?

**The Minister for Planning and Environment:**

Sorry?

**Deputy J.H. Young:**

That work that you are talking about, what are you going to do with that?

**The Minister for Planning and Environment:**

That will get to a conclusion and there may well be further changes to the building bylaws to revise the practices we have got at the moment, maybe to the extent of reversing some of them.

**Deputy J.H. Young:**

Obviously our bylaws are principally based on the U.K., are they not? Can we adapt them locally? How free are we to adapt to local requirements?

**Director, Building Control:**

Entirely free. We have requirements in Jersey that do not apply elsewhere, so our system, the model is based on the U.K., but the requirements are not identical.

**Deputy J.H. Young:**

So we can respond? If, for whatever reasons, we need to modify to deal with this or on any other issue, we can?

**The Minister for Planning and Environment:**

Yes, and from our way of thinking, that is in line with what you were asking about, where was the Minister for the Environment's interest in the matter. I think there is an over-arching high-level strategic interest in the generality of improving houses and, as I mentioned, resources and the use of, which sometimes the individual departments that do have some other interest do not necessarily look at.

**Deputy J.H. Young:**

Okay. Minister, the bylaws for the measures that Mr. Roscouet has explained, do they cover all types of buildings?

**Director, Building Control:**

For radon measures?

**Deputy J.H. Young:**

Yes.

**Director, Building Control:**

No, they just apply to dwelling houses.

**Deputy J.H. Young:**

Why is that?

**Director, Building Control:**

Historically, prior to 1987, there were no measures at all. There was a major review of building standards in 1997. We were aware of work that had been done on radon and the Minister at that time decided it would be an appropriate measure to incorporate measures for new dwellings, because that was seen as the area where there would be most benefit by having measures. So that was introduced in 1997, based on the testing that had been done around that time.

**Deputy J.H. Young:**

What about other buildings?

**Director, Building Control:**

Other buildings, at the time the view was taken that the risk to radon is related to exposure and that exposure is greater in dwellings than in places of work. That was the decision that was taken, that it would be appropriate to start with dwellings and that was it.

**Deputy J.H. Young:**

That was a decision taken by who?

**Director, Building Control:**

That would have been the president of the committee at the time.



**Deputy J.H. Young:**

So it goes back to the committee?

**Director, Building Control:**

Yes.

**Deputy J.H. Young:**

Has that decision ever been reviewed in the light of experience elsewhere?

**Director, Building Control:**

No.

**Deputy J.H. Young:**

Is that consistent with other places?

**Director, Building Control:**

The building regulations in the U.K. I understand do not apply to non-domestic buildings<sup>7</sup>, so our standards are not that different to elsewhere, I would suggest.

**The Deputy of St. Martin:**

Do you think in circumstances where a building is being used 24 hours a day, 7 days a week that maybe it should change and we should be testing something like that? Or that is a political question maybe for the Minister rather than a...

**The Minister for Planning and Environment:**

Could you give me a specific instance?

**Deputy J.H. Young:**

I will give you an example: a prison.

**The Minister for Planning and Environment:**

A prison. I do not know that all parts of a prison...

**Deputy J.H. Young:**

Presumably the inmates, the people there cannot check their radon levels.

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<sup>7</sup> The Panel's adviser subsequently confirmed that the protective measures apply to all buildings in the UK (cf. BR211 2007 edition)

**The Minister for Planning and Environment:**

Presumably they cannot, but from the building work - when I was a member of the prison board - that has been undertaken in the last 10 or 15 years, I would expect that the cells have been brought up to higher modern-day standards.

**Deputy J.H. Young:**

But Mr. Roscouet told us that it does not apply to non-domestic.

**Director, Building Control:**

Just because the bylaws do not apply, it does not mean that a client cannot choose to put measures in in their building.

**The Deputy of St. Martin:**

Could I just change the subject, Chairman?

**Deputy J.H. Young:**

Yes, all right. There are other examples.

**The Deputy of St. Martin:**

I would just like to ask the Minister about his views on radon information and conveyancing. Obviously conveyancing is a section of building which is outside of State Government control; it resides very much with the legal fraternity. Do you think there is a place for radon information - and I use it in the loosest terms - in conveyancing?

**The Minister for Planning and Environment:**

I quite like the U.K. Government's previous scheme for having home logbooks, which are part of the conveyancing process, which outlined the whole building history of a particular house and gave it some type of efficiency rating as a way of kind of getting value out of the conveyancing systems that we do not otherwise have. That system has somewhat fallen into disrepute in the U.K., unfortunately.

[12:15]

We are back to these things not necessarily being considered, but I think just as when we go out and buy a washing machine or a car or whatever, we are now kind of being encouraged to pay particular attention to the efficiency of the vehicle and the extent to which it pollutes the external environment, or indeed our own internal environment, to dangerous levels for individual health. I think, yes, it could be something that could be considered, but how you bring that about is another

question, because at the moment, we would be introducing a State measure which impacted on conveyancing clients and legal firms and all the rest of them, which is a private matter, and again, I am not sure to what extent if the States were to decide to involve itself in that kind of business that the people who are in that business would see that as an intrusion into their business independence and...

**Deputy J.H. Young:**

But it is not something you would promote, Minister, since in effect you do not have any responsibility for this.

**The Minister for Planning and Environment:**

If I were a benevolent dictator or whatever, then yes, I...

**Deputy J.H. Young:**

If you were a benevolent dictator?

**The Minister for Planning and Environment:**

Yes, yes, yes.

**The Deputy of St. Martin:**

Surely you are that already, Minister.

**Deputy J.H. Young:**

What type of dictator are you, Minister?

**The Minister for Planning and Environment:**

I do not know. That is for others to decide, if you get my drift. Now, if I was in a position of greater power and authority to only get out of the system what I thought was best for everybody, then perhaps that might be something I would encourage people to do, but at the moment, I think there has got to be this balance between State intervention through laws and health laws and a proper testing and weighing up of whether or not all of the work that we would undertake is worth it, worthwhile in terms of the common benefit or public good.

**Deputy J.H. Young:**

So are you saying that should be done or should not?

**The Minister for Planning and Environment:**

At the moment, if the European Community turned around and said: "Right, okay, we need greater controls in order to control radon in water or the indoor environment" then on assessing that information, that would give me a positive encouragement.

**Deputy J.H. Young:**

So you respond to E.U. changes?

**The Minister for Planning and Environment:**

But in the absence of that, obviously any minister in a position to implement changes to how people live, without having an adequate scientific back-up or social or cultural kind of change framework that people have agreed and signed up to, you run the risk of telling people what to do and they do not want to do it, so you are not going to get them to do it if it is still up to them to do it.

**Deputy J.H. Young:**

Right, as the Minister for the Environment, you are saying to us there are limits to how far you can go to introduce new ideas...

**The Minister for Planning and Environment:**

There are, absolutely.

**Deputy J.H. Young:**

... new technologies into these things.

**The Minister for Planning and Environment:**

Definitely, and it does not stop the department from issuing public statements through the Eco-Active scheme or any other part of our department to encourage the wise use and better practices to be undertaken, even if they are only going to have the case of those who would wish them to be applicable.

**Deputy J.H. Young:**

I am going to stop you there, Minister, and I am going to ask our adviser, I think you may have a question here.

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

Yes. It was going back to the discussions on the bylaws and the fact that you inspect for radon protection in new builds and obviously then sign-off on completion. Do you add any information or advice that householders should test in the completion information?

**The Minister for Planning and Environment:**

No, but that is obviously something that is being covered more and more by local U.K. authorities and it is something that we could quite easily add on to our educational sites.

**Deputy J.H. Young:**

So you will look at it?

**The Minister for Planning and Environment:**

Yes.

**Deputy J.H. Young:**

Does that clear up that point? Any other points?

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

Yes. I mean, they do not inspect in the U.K. at the moment, so I am very encouraged that you do.

**Director, Building Control:**

I think it is an important element. If you do not inspect it, I would have much less confidence in the measures.

**Deputy J.H. Young:**

Do you want to come back again or does that do that one?

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

No, that is fine, thank you.

**Deputy J.H. Young:**

John.

**The Deputy of St. Mary:**

At present, can homeowners or tenants apply to have their accommodation tested for radon and who would they apply to for that service?

**The Minister for Planning and Environment:**

I think that is an area that is covered by the... I am not sure it is covered, but it would be covered by the *Air Quality Strategy*, and as I say, because the *Air Quality Strategy* is mainly centred on the external areas, first of all, we have not got as far as moving inside.

**The Deputy of St. Mary:**

There could be a case where tenants in another building, for instance, are extremely worried about it and that they want to allay their fears.

**The Minister for Planning and Environment:**

It is certainly something that we could consider, and as I mentioned earlier, a quick trawl on the internet would show you various U.K. authorities. One that I looked at fairly recently was East Devon, and they have got pdf files, like a checklist, as to what you do if you think you have a problem, who you can apply to to get some government assistance if assistance programmes are in place and that type of thing. We do not do that at the moment, but it is certainly something that I would consider doing.

**Director, Building Control:**

If I could just add, on the States website there is guidance about how to go about having your house tested. It is a pretty simple process. You pay a fee, you get given detectors to put in your house and you send them to be tested and you will get a full report back.

**The Deputy of St. Martin:**

Have we got any idea how often this site is accessed? Are we aware that it is publicised enough, that people know it is there and it is used?

**Director, Building Control:**

It is on the gov.je website, so anybody who uses the States website would easily find it by typing "radon" into a search.

**The Deputy of St. Martin:**

Just type in "radon" and it...

**Director, Building Control:**

Yes, it will just come up. There is lots of information there.

**Deputy J.H. Young:**

Do you want to follow up, John?

**The Deputy of St. Mary:**

Yes. I appreciate it is on the website, but there is still a lot of people that cannot get on to the website, especially the elderly. Will this be published in the media?

**The Minister for Planning and Environment:**

I think we have got to be a little bit careful, and certainly a lot of the political discussion that took place as to whether or not we should have further radon surveys and this, that and the other, the advice that was being given was that we should not be creating the sense that there is a huge kind of panic measure, because the problem is so big that we are all going to die tomorrow if we do not take kind of radical steps to improve the situation. As I said previously, these things, we have to determine whether or not there is a big enough problem in the first place. We are going to obviously kind of extend our actions according to how big that problem is, and from the medical advice that we have had, the indication with the last report was that the exposure to risk for houses that had not been converted or had any of the membranes put in or some sort of whatever, and there was a greater potential for hazard to yourself if you were a smoker in addition to living in one of these places. But then again, the guidelines that come out are just rules of thumb and just to say that you are a smoker and you are living in a 250 year-old granite place does not necessarily imply that you are going to come down with any cancer or lung cancer-related illnesses, because there is a whole load of genetic kind of links to say that some people are going to be more prone to lung diseases and those external contamination conditions than others. So it is not a clear case of saying: "Right, if you have got a building and we find ourselves with too much radon being released, that is it, you had better come in quickly and knock your building down or do something very expensive, because if you do not do that, you are going to diminish your chances of living for that length of time that you would otherwise be able to." So it is kind of a grey area, but what we must not do - and I do not think what we should be doing - is to be responding at a level that would indicate that there is a huge problem and a huge public health problem which we have not been advised on as yet.

**The Deputy of St. Martin:**

I think I would quite agree with that, Minister, but whether it is an old building or a new building, if we do work that helps to hopefully mitigate radon, testing results would be useful to see how good we are being.

**The Minister for Planning and Environment:**

But then you have got the public interest and the private interest, and again, what I was saying previously, we have to be careful of the extent to which we tread on people's toes in a private capacity and take away their rights to abuse themselves, should they wish to do so.

**The Deputy of St. Martin:**

Absolutely, but it must be helpful to test occasionally to see that the mitigating circumstances that one is putting in place are viable and proving useful.

**Deputy J.H. Young:**

Minister, are you saying then that we should not do anything, that we should not even be aware? Looking back, I asked because the panel has been informed that we have done tests over a period of 27 years, testing in 1987, 1988, a second phase of testing then shortly after that and then in 1992 and in 2012, and in total, I think there was something like 130 homes tested over the period of 27 years. That strikes me as being rather low and particularly as that what we have been told in those reports is that the last test, 17 per cent were above the action level of those tests. In response to questioning about whether there was a need to do more testing, whether to make more people aware, are you saying that we should not?

**The Minister for Planning and Environment:**

I think we are probably about at the right level until medical evidence builds up to suggest that kind of greater measures have to be taken. We have got the radon advice sheet, for example, that says: "Anyone still wishing to have a radon assessment can access this from the U.K.'s Health Protection Agency via the Health and Social Services Department's Health Protection Team, [telephone number] at the reduced negotiated rate of £35 per survey." So there are measures there to assist people who might be worried, but I think that is different to asking the Environment Department or the other health departments to actively up the level of intervention in order to reduce the potential risks to a miniscule level, which we are being advised is already at a low level.

**Deputy J.H. Young:**

Perhaps if Mr. Roscouet could comment. Can he recall anybody ever coming into the department asking for help, advice and guidance regarding radon in their buildings?

**Director, Building Control:**

Yes. We have had on occasion people, particularly after the news release in 2012, that generated inquiries to the department to say how could they go about getting their house tested. Some people are quite knowledgeable and they already are aware of radon issues and they come to us after a test, saying could we advise on what measures could be done to reduce the levels, and we give that advice.

**Deputy J.H. Young:**

Right, so you have been able to respond to those?

**Director, Building Control:**

Yes. Yes, we have. We have not physically done the test.

**Deputy J.H. Young:**



But these were people that had the tests done?

**Director, Building Control:**

Some people had tests done. Some people asked about how would they go about getting a test done following the release and we guided them into the direction of how they could do it. That is the sort of questions that we are asked, so we say: "We do not do the tests on the Island. They are done off-Island." They understand what is required for the test and if the readings come back and they are concerned - and some people have been - they have asked us how could they, for their situation, deal with that problem and we have given advice on that.

**Deputy J.H. Young:**

Can I ask you, do you do testing for any other types of requirements to the bylaws? Do you do actual tests for anything else?

**Director, Building Control:**

Yes, we do.

**Deputy J.H. Young:**

On what?

**Director, Building Control:**

We test for sound insulation, we test for air leakage for energy performance, we test for drainage leaks. A number of tests.

**Deputy J.H. Young:**

But not for radon?

**Director, Building Control:**

Not for radon.

**The Deputy of St. Martin:**

Are you aware of anybody who contacted you following a high test initially that has had some work done of their property who has retested and had some results post-work?

**Director, Building Control:**

I am not aware of anybody coming back after doing the remedial works and having further tests done. My experience is if there is not a problem, they do not tend to tell us.

**The Deputy of St. Martin:**

Is it possible that public health would have that information?

**Director, Building Control:**

It is possible, it is possible. Environmental Health may have other information that we have not got.

**Deputy J.H. Young:**

Can I ask, Mr. Roscouet, when did you last meet the public health team to discuss this?

**Director, Building Control:**

To discuss radon specifically?

**Deputy J.H. Young:**

Yes, building bylaws and radon.

**Director, Building Control:**

We had discussions at the time of the tests in 2012, talked about the results of that. I have been provided with test results to look at and see...

**Deputy J.H. Young:**

Oh, you have been shown the test results?

**Director, Building Control:**

I have, yes.

**Deputy J.H. Young:**

What was the purpose of that?

**Director, Building Control:**

Just so that we could see whether or not there are issues on any of the properties tested were ones that bylaws had applied to, because that would have informed us on maybe there are issues there.

**Deputy J.H. Young:**

Oh, so you got the information about the test results. You could see which ones were unsatisfactory... sorry, not unsatisfactory, in excess of the action level.

**Director, Building Control:**

That is right, yes.

**Deputy J.H. Young:**

Then you were able to check whether or not...

**Director, Building Control:**

Yes, any that related to modern-day construction that we were aware of, that measure of...

**Deputy J.H. Young:**

What were your conclusions as a result of that?

**Director, Building Control:**

None of the ones tested, affected properties, had any bylaw measures. As I say, they were all very old properties.

[12:30]

**The Deputy of St. Martin:**

All the properties that were tested were old properties?

**Director, Building Control:**

Yes, the majority of them were 1900, 1950s.

**The Deputy of St. Martin:**

Would that indicate to you that they were tested not at random then?

**Director, Building Control:**

I am not sure how the test was done. I am not sure.

**Deputy J.H. Young:**

Did you ever go and look at any of these properties?

**Director, Building Control:**

No, but the detail, it gives quite a lot of information on the construction, about the floor construction and the age of the property and the type of construction.

**Deputy J.H. Young:**

We have not got that information.

**Deputy J.H. Young:**

No. So did you receive all the test results?

**Director, Building Control:**

Yes.

**Deputy J.H. Young:**

Would I be right in assuming you received that from the Minister for Health or her Department to assist you in checking out whether the bylaws were working and whether...

**Director, Building Control:**

Yes, and whether there were issues from a bylaw point of view that we needed to know about.

**Deputy J.H. Young:**

Whether you needed to know, but your conclusions were, if I may sum up, that they did not affect any properties that were covered by the new bylaw requirements, but other properties?

**Director, Building Control:**

That is right.

**The Deputy of St. Martin:**

Was that a surprise to you?

**The Connétable of St. John:**

Would you share those results with this panel, Minister?

**The Minister for Planning and Environment:**

Yes, no problem, if it is available.

**Deputy J.H. Young:**

Yes, that is new information to us. We had not been given that.

**The Minister for Planning and Environment:**

One of the interesting points for me is the extent of which certain areas in the Island could be designated as hotter spots than others, and if you look at the geological formation that is there, it is likely that some areas are hotter than others.

**Deputy J.H. Young:**

What is your view about doing that then?

**The Minister for Planning and Environment:**

I think the work is probably already undertaken in terms of the geological maps that have been produced by other bodies.

**Deputy J.H. Young:**

Yes, but you are proposing, I think, what I might call a proposal about target areas. Is that what you are saying?

**The Minister for Planning and Environment:**

If the E.U. and the U.K. decide with their health authorities that further measures need to be taken, then obviously those measures would be better taken if they were targeted. Although we can designate the Island, because the bulk of it is granite formation or whatever, there is a wide variation between the make-up of those rocks and the extent to which radon may be able to be produced from those rocks. So the production of a further map on our educational site might be all that is required to say: "Look, if you live in close to Deputy Young or whatever, if he is in a bad area, then make sure you come to us to have a check."

**The Deputy of St. Martin:**

Do you think that is fair, Minister? We were given a list of the properties that were done and we were given the parishes they were done in and their results, but the worst - or the least best 8, if you like - are all in different parishes, so we know from looking at the very crude results that we have that this is an Island-wide issue, if it is an issue at all.

**The Minister for Planning and Environment:**

No, I do not think that is right. It is certainly not an individual parish-wide issue unless the underlying rocks on which the parish are built are uniform and generally the different parishes are based on different rock formations.

**Deputy J.H. Young:**

So to be clear, Minister, you are saying that you do favour, if I am wrong...

**The Minister for Planning and Environment:**

If the medical evidence out there is suggesting that further intervention is needed to be done by States departments in order to improve the general public health situation of the radon advice that

was given and it was useful to publish a map suggesting which areas are more likely to be able to express the problem or not, then the publication of such a map would be something we could undertake very, very quickly.

**Deputy J.H. Young:**

Would you say free testing of properties in...

**The Minister for Planning and Environment:**

It really depends on how big the problem is. As I said earlier in response to Deputy Le Bailly, the key issue is not to be sending out messages that: "Unless you get your £35 test and you are declared clear, you are going to die tomorrow."

**Deputy J.H. Young:**

We are seeing the Minister for Health this afternoon. Obviously we will try and put questions...

**The Minister for Planning and Environment:**

The Minister for Health herself, in relation to doing the surveys for radon, has got medical advice to the effect that she does not think that it is as large a problem as perhaps others might.

**Deputy J.H. Young:**

No, but the question we are trying to ask is 130 tests over 27 years sufficient evidence on which to base our policies? Are we sure that we have got the level of intervention right? I think that is where the panel wants to get to.

**The Minister for Planning and Environment:**

I think we could run a check with the other U.K. local authorities to the extent to which their advice services have been relied upon and taken up as a comparison.

**Deputy J.H. Young:**

Okay, do you want to get back in?

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

Following on from that, you said that you were able to discern from the latest testing, which I think was about 60 tests, that the ones in the newer builds had lower levels than the ones that were built prior to that. Do you think that there was enough sample there for you to be able to discern that, and if so, how many were in each of those groups? Did you have many?

**Director, Building Control:**

I do not think I did say that.

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

Sorry.

**Director, Building Control:**

What I said was none of the properties tested were built to the bylaw standards that we currently have. Those bylaw standards came in 1997 and none of the properties tested were constructed since 1997.

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

Right, sorry. I misunderstood you. I thought you said that you were able to discern that they were...

**Deputy J.H. Young:**

But you also said that you did not go and see them.

**Director, Building Control:**

No, I did not go and see them, but as I say, what I was looking at the results was to see if there were any properties tested that had radon measures built in, as required under the bylaws, and if I had seen those above the recommended level, that would have raised a concern to me, but there were not any.

**Deputy J.H. Young:**

But how would you know? If you did not go and see them, how did you know?

**Director, Building Control:**

Because the dates of the properties were given on the data.

**Deputy J.H. Young:**

But can you be sure that nobody put one in? Can you...

**Director, Building Control:**

To build in the radon measures in an existing building is very difficult to do - in fact, impossible to do - because a radon barrier needs to extend right through the plane of the building, right through the walls to the outside. If you have got an existing house, you cannot do that.

**Deputy J.H. Young:**

That is interesting. So you have said just then it is impossible to do.

**Director, Building Control:**

It is, yes.

**Deputy J.H. Young:**

So what advice do you give to somebody who comes to you and says: "I have got an old house. I think I might have got a problem. I have done my test. What do I do"?

**Director, Building Control:**

What we would advise is that they try to deal with any obvious gaps in the ground floor, go to the floors, seal the gaps and things, but the main thing is to put in a depressurisation sump and fit a fan to try and extract the radon at source. That is the best you can do. That is not as good as what the bylaws ask for, but that is about the best you can do.

**Deputy J.H. Young:**

Oh, I see. I misunderstood you. So you can do something?

**Director, Building Control:**

Yes, but it would not be as good as the bylaw measures.

**Deputy J.H. Young:**

Okay. Thank you for clearing that up. Sorry to interrupt you.

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

No, that is okay. Does that mean that we have no test results for buildings built under the bylaws and do you think it would be appropriate to test some to get a feeling for whether or not they are effective? I know you inspect and obviously the levels should be lower if they are fitted with care, and I think you said that that was the case.

**Director, Building Control:**

Yes, I would totally agree. I am a big advocate of testing, because that is the only way you are going to know what we all think has been done has been done, and we do tests in a number of other areas. The difficulty with testing radon is that it needs to be done after occupation, which is after our involvement. We do not have continuing control, so to go to somebody after they have moved into their new house that we have signed off and say: "You are going to need to some testing. We need to do some testing and it is going to last for 3 months" they will probably tell us to get lost.



**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

This was sort of what I was alluding to when I asked the question about whether you advise testing at the completion stage.

**Deputy J.H. Young:**

But could it not be incorporated in the sign-off process, where part of the signing off is: "You will do a radon test in the next 3 months and we will have the result"?

**Director, Building Control:**

I do not think our legislation extends that far and we do not have that...

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

But you could at least put the advice forward.

**Director, Building Control:**

Yes, we could put in an advice note. Yes, we could say to somebody: "It is a good idea."

**Deputy J.H. Young:**

If there was testing done after completion, from what you have said, you would like to see the results.

**Director, Building Control:**

It would be very useful for us to have those results, but people may not want to share them. We cannot compel them to do that.

**The Deputy of St. Martin:**

In hindsight, when these 63 tests were done in 2012, it would have been a good idea to have thrown in a few buildings that were post-bylaws.

**Director, Building Control:**

I would agree with that, yes.

**Deputy J.H. Young:**

Minister, would you go along with that it would be useful to have some tests done to check whether or not bylaw compliance is working?

**The Minister for Planning and Environment:**

Up to a point. If the bylaws that are being applied are bylaws that are being changed in accordance to bylaw changes from other jurisdictions who have already done the testing, then there is not a lot to be gained in terms of determining whether or not in our take-up of those bylaws they are worthwhile.

**Deputy J.H. Young:**

Okay, thank you.

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

One thing that is very good is that you have got the full protection, which means that if the building does test high, you can connect the fan...

**Director, Building Control:**

We have got an easy solution.

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

... an easy way to fix.

**Deputy J.H. Young:**

That works, Mo. Do you know how many properties that do have the retrofitting and those fans on to sumps that were put there?

**Director, Building Control:**

I am not aware of any. That does not mean it does not happen, but I am not aware of it.

**Deputy J.H. Young:**

Would you be told?

**Director, Building Control:**

Probably not.

**Deputy J.H. Young:**

So you would not know about it?

**Director, Building Control:**

No.

**The Minister for Planning and Environment:**

I think there are strong parallels, as I mentioned earlier, with smoke detectors.

**Deputy J.H. Young:**

Okay, right. I think we are probably getting to the point where we have come to... can I just run through my colleagues and see if you have any follow-up questions? John?

**The Deputy of St. Martin:**

I am good.

**The Deputy of St. Mary:**

No, I am fine with that. I think most things have been covered. I am concerned that there is no monitoring. There should be an ongoing monitoring process, which should be even before you start a build. There is no point in having a bylaw for sumps if you do not require it.

**Deputy J.H. Young:**

Any comments on that?

**Director, Building Control:**

The view we take on that is you cannot be certain before you build whether you have got a problem. Putting in the sump, which is a relatively inexpensive operation, is a good precautionary method. It is much easier if you have a problem after to deal with that problem by having that sump in. I would certainly, if I was buying a house, prefer to have a sump than not have a sump. As I say, it is a relatively cheap thing to do.

**Deputy J.H. Young:**

Phil, you want to...

**The Connétable of St. John:**

Yes. Just there was one thing that you said, Minister, there was 3,000 boreholes registered or thereabouts on your register. Was the information collected a compulsory collection of that information or was it voluntary?

**Director, Building Control:**

As I understand it, you are required to register your borehole under the law, and that is where those figures come from.

**The Connétable of St. John:**

When did that law come into being?

**Director, Building Control:**

It was 2007. It came into force 1st January 2010.

**Deputy J.H. Young:**

I think, John, just a quick... because I interrupted you and then I am going to close.

**The Deputy of St. Mary:**

Would it be a simple process to do a monitoring on a site before a build by a simple process of putting an upturned dustbin with the monitoring device underneath that?

**Director, Building Control:**

I do not think so, no.

**Deputy J.H. Young:**

Okay. Right, thank you, I think I am going to close. Did you want to come back?

**Adviser, PHE Centre for Radiation, Chemical and Environmental Hazards:**

Just to say no, because usually, if you monitor a site beforehand, when you come in to do the process of build, the first thing you do is take off the top layer of soil, so you will measure radon in the soil gas, but you will not know what the building will have in it once it is built.

**Deputy J.H. Young:**

Thank you for clearing that. Any other points you want to clear up of inaccuracy and so on that we should deal with? Okay. Right, I thank my colleagues and thank you, Minister, and Mr. Roscouet, thank you very much for being so helpful to us and giving us the time. Malcolm, are there any other issues we need to clear before I close the meeting?

**Scrutiny Officer:**

No, I do not think so.

**Deputy J.H. Young:**

Thank you very much. I am going to close the meeting and thank you all for attending.

[12:42]