

# Transcript of extended interview

## Health and Safety Executive energy policy team: Tony Almond and Trevor Sexty

*Ruth Hayhurst (RH) I'd like to begin with the process of regulating onshore oil and gas from your perspective and I thought it would be helpful to begin with what you see as the main risks for this industry. What is it that you are seeking to avoid or mitigate?*

Tony Almond (TA) I've brought a copy of our sector plan along for you. I think it sets out quite clearly there that we are primarily looking at the major hazard risks - the risk of fire or explosion that could cause death or injury to a number of people.

*RH So it's really fire and explosion that are your concerns as opposed to pollution, which would be controlled by the Environment Agency?*

TA That's right. Although we do regulate occupational health and safety on the site so we are obviously interested in making sure that all of the workforce and anyone else who could be affected by the work is protected.

*RH And are there any additional or different risks from unconventional operations as opposed to conventional oil and gas.*

TA No

*RH So no difference as far as you're concerned?*

TA As far as we're concerned, the way that the wells are designed, drilled, constructed, maintained, operated and decommissioned is exactly the same.

*RH In terms of the timescale, where do your responsibilities begin and where do they end? When someone sets up a site for example, when do you start to take responsibility?*

TA It starts before then. We would start communicating with the operator in the planning stage, when they are planning the well design, and we would then start to - if it's a new operator particularly and again this is set out in our strategy - we would then look to have meetings with that operator, look at the level of competence they have, the experience they have, what they've done before, what their health and safety record is like and we would start to build up a picture of that operator's health and safety performance, how they manage health and safety.

Then we would look at the well design. Each well is different. When we get the notification that is required by regulations we have our own specialist wells inspectors who scrutinise well design and the programme of work.

We will also look at the equipment that the operator is planning to bring to the site to ensure it can deliver what the operator is planning to do.

*[3:20] RH How long does your responsibility go on for?*

TA It goes on until we are satisfied that the well has been properly decommissioned as required by the regulations.

*RH So that would be some period after abandonment and restoration?*

TA No. Once that work is completed. Our vires, where we can legally operate, is in the workplace. So once that site stops becoming a workplace, we no longer have that regulatory power.

*RH So unlike the Environment Agency which might have an aftercare, or the planning authority who might have an aftercare or an ongoing monitoring responsibility, yours stops at the point it stops being a workplace?*

TA Yes

*[4:20] RH In terms of the geography or the location, you said your responsibilities were for the site as a workplace. Is your responsibility limited by the perimeter of the site?*

TA No. The only limit on our responsibility is where people may be affected by the operation.

*RH So how do you define where the risk stretches to?*

TA First of all we require the operator to do an assessment of that risk. We would look at that risk assessment to see that is suitable and sufficient.

*[5:05] RH So in a typical risk assessment, how far away from the site does your responsibility go?*

TA There's no set distance. It really depends on the well and the risk associated with it and what else is present on the site. It's not like explosives, for example, where there is a set distance for a set amount of explosives where other developments are restricted. This is a risk-based approach.

*RH Can you give me an example of how far that responsibility might stretch?*

TA I don't think I can give you a distance. What it says in the regulations is that as far as they can, the operator should ensure that the health and safety risks are restricted to the site boundary so we would check the operator is working to that protocol.

Where their assessment shows that they can't do that, then we would look at what mitigation measures they have in place.

*RH An explosion wouldn't be limited to the perimeter of the site.*

TA It depends. If you look at the recent fire and explosion in Virginia, I don't think the actual impact of that left the site.

What we do look at is where the well and other critical infrastructure is placed within the site to ensure the operator is working to that principle as much as possible.

*[7:15] RH Is your responsibility defined by the regulations that you work to? Are you working to a set of regulations?*

TA No, the regulations don't define our responsibility. They define the responsibility of the operator.

*RH Do the regulations define how you work with the operator?*

TA To some extent, yes We enforce the regulations, so we look to the operator to fulfil the obligations that are placed on them because of those regulations. We have an Enforcement Policy Statement, which is available on our website, and it sets out how our inspectors take action to enforce the law when issues of non-compliance, hazard or serious risks are identified.

*[7:56] RH Do you have any responsibilities over and above enforcing those regulations?*

TA Yes, we do. Enforcing other regulations. We're not just talking about regulations that are specific to oil and gas sites. There are a number of other regulations.

*RH Like working at height for example?*

TA Exactly, yes

*RH But it's a set of regulations that you're looking to enforce and ensure that the operator complies to. That's defines your job?*

TA Yes, and it has to because we wouldn't be able to take enforcement action if there weren't any regulations that operators have to comply with.

*RH Do all these regulations apply to the workforce and the workplace as opposed to the wider environment?*

TA They apply to the work activity, not specifically to a place, though they can apply to a place as well. If you look at the Offshore Installations and Wells (Design and Construction) Regulations, the key requirement in those regulations is that the operator should ensure that there is no unplanned release of fluids from the well, so far as reasonably practicable, so that applies to the activity they are conducting on that well.

It's not defined as a site or a particular boundary.

*RH You said that when you got a notification that a company wanted to drill a well, that's the point when you're starting to work very closely with the companies involved?*

TA That's right, yes.

*[10:05] RH And you mentioned that you looked at their capabilities and their experience. How does that affect the approach that you take to them?*

TA I think it's fundamental. Our intervention plan, what we will do around a particular well or a particular operator, is based upon that intelligence – what the operator's performance is, what their level of competency is – and then we would start to look at how complex the well they are designing and constructing is. We would then set our regulatory interventions to meet that level of risk.

*RH So how do you assess the experience or capability of an operator?*

TA That's done through all of our interactions with them. We would have what we call "Headquarters meetings" with them, so we would either call them into our office or we would go to their headquarters and that would be done through quite senior people within our inspection team. They would make judgements based on that meeting.

*[11:18] RH What sort of things do you ask them?*

TA We ask them where they have operated before. We would ask to see their Health and Safety documents, their Health and Safety protocols. We test some of those with them. We would ask to talk to the key people within their drilling team. We would look at what sort of qualifications they have got, where they have been before.

We would then start to talk to the other regulators as well. We work very closely with the Environment Agency, so we would maybe talk to the Environment Agency about that particular company and what their experience has been.

*[12:10] RH If you had a very competent, very experienced company, what would your approach be to them, and how would that differ from a company where you thought they didn't have much experience and you were concerned perhaps about their level of competence.*

TA If we were concerned about their level of competence, we would ask them to improve that competence first of all. So we would say you need to either bring more experienced people in, or you need to give your people more experience or training.

*RH So you'd send them off on some training courses –*

TA If we thought their competence was below what was required, that would be one of the things that we would be talking to them about. HSE wouldn't send them on a training course – that would be the operator's responsibility.

I think the basic approach would be the people who we were less confident in would be the ones that would get more site visits, they would get more scrutiny from our perspective.

*RH Your well inspectors, are they employed by HSE or are they employed by the companies?*

TA They are absolutely employed by HSE. They are not the independent well examiner –

*RH So you have well inspectors, and then you have someone else who is the well examiner. Tell me about the well inspectors, where do they come from?*

TA They exclusively come from industry and we do insist that they have industry experience.

*RH So they are previous drillers?*

TA That's right. They will generally have worked for a drilling contractor or been a drilling engineer for an operator. Then we spend a few years giving them our regulatory training.

*[14:10] RH How many well inspectors do you have?*

TA There's a team of 10 at the moment.

*RH For onshore UK?*

TA For onshore and offshore.

*RH What would they do if they went to a site?*

TA Trevor has been to a site with one inspector quite recently.

Trevor Sexty (TS): There's all manner of things. They will be looking from the occupational health and safety aspects as well, but they'll be looking at well integrity, logging operations, they'll be looking at any pressure tests that have been done.

TA They don't just talk to the managers on site, they talk to some of the workers onsite as well, to ask them what they're doing, what Health and Safety training they've had, ask them if they understand the operation they are conducting, risks associated with it and what to do if something goes wrong.

It's important to say that when we go onsite, it's not just one inspector who goes, we also have another group of inspectors who have been trained to look specifically at surface operations.

*RH So what sort of things are they looking at?*

TA They're looking at Occupational Health and Safety, working at height, confined spaces, working with equipment, vehicles, things like that.

TS: They would focus quite heavily on any safety-critical equipment as well, make sure everything is up to date, the right certification and so on, that it has been tested and is in good working order. They would also check safety plans and records of fire drills.

*[16:15] RH So you have 10 well inspectors who are working onshore and offshore. How often would they visit a typical site? Would they always visit a site that is operating?*

TA They will always visit a well that is going to be high volume hydraulically fractured. As I said earlier, our visits are based on the intelligence we have put together on each individual operator and we set our visit plan based on that intelligence.

*[16:55] RH If you had a lot of confidence in an operator, is it possible that they wouldn't get a site visit?*

TA It's possible that they wouldn't get a site visit very often, but they would get a site visit at some stage.

*RH And that applies to conventional as well as unconventional?*

TA Yes, exactly. Although obviously, as I said, we are required to visit any site that is going to be hydraulically fractured.

*RH And the visits – they are pre-planned?*

TA They are pre-planned. Unless there was a good reason we wouldn't turn up on a site unannounced and that's because we want the right people to be available.

TS And sometimes the right sort of activity as well, so that we can observe it.

*RH You want to see a particular operation?*

TA Yes. I think it's important to say here that the site visit itself, while it's an important part of what we do, is actually only a part of the way we regulate the industry. For us, site visits are important, but only important for how they fit in to our overall regulatory approach.

*[18:15] RH So what else happens then, what is the other part of the regulatory approach?*

TA The other part starts with the notification and we scrutinise that in order to be content that the operator has got the design of the well right. The OGA will then give them consent to start drilling the well.

During the construction of the well, the operator must send a weekly report to the HSE.

*RH What would the weekly report look like?*

TA They contain information on how far they've drilled, how far they've cased, the drill fluid density of the well – what's the weight of the mud so we can tell what the pressures are like. It's a summary of all the activity on the well for that week.

That comes in on an email on whatever day of the week is agreed and it allows the inspector to go back to the notification, and we can then say OK, this looks like it's going on track or hang on a second, there's something that's not going according to plan here. We need to go back and talk to them.

*[19:44] RH So the notification, that comes to you from the OGA?*

TA No, from the operator.

*RH What level of detail will it have? Will it have a Gantt Chart on what's going to happen on what day?*

TA That's part of the notification. What we get from the weekly report is a summary of the activity on the well that week.

When the inspector goes for a site visit, they will be verifying the onsite records to make sure they match with what we're being told.

*RH How do the well examiners fit into this process?*

TA The well examiner is part of our regulatory requirement, so it's part of the Offshore Installations and Wells Design and Construction regulations and that sets out that the operator must have a well examination scheme and appoint an independent person as examiner to deliver that scheme for them.

*RH Would that person be full-time on a site?*

TA They don't actually work on the site, so what they will do is they will have a scrutiny role as well. Their role is to ensure that the well is being designed and constructed satisfactorily, similar to our inspectors from the design stage right through to decommissioning.

They will look to ensure the right industry standards are being met, the operator's own standards are being met and the regulations are being complied with.

They're not a regulator, more like quality control.

*[21:25] RH What contact do you have with the examiners?*

TA We will inspect the well operator's examination scheme periodically and that will include a meeting, or an Interview as we call it, with the well examiner.

*RH The well examiner could be looking after several wells presumably.*

TA Yes, that's possible.

*RH And they would travel around the different sites?*

TA They can visit the sites. There's no requirement in the regulations that they must visit the sites, but they can do. What is required is that well operators must keep records and they must tell us where in the UK those records are held.

*RH Who are the well examiners? What sort of people are well examiners?*

TA They are very experienced industry people.

*RH So what have they done before?*

TA They'll have worked on multiple big projects.

*RH Would they have been drillers or site managers?*

TA They will have been drillers and probably site managers as well, or drilling engineers and they will have worked up that chain.

TS That's the purpose of the inspection, to make sure that the people they're employing to do this have the right level of competency.

TA And independence. There are requirements in the regulations and they have a set level of independence, they're not within the same arm of the company as the drillers or the people responsible for the project.

*[23:00] RH This is where the industry is sometimes criticised for allegedly self-regulating. What's your view of this?*

TA It's very clear that the independent well examiner is not a regulator, they have no regulatory powers, so from that point of view, I can't agree with that.

*RH So it's not a regulatory role?*

TA No, but it is a requirement of the regulations that the operator must appoint one.

*RH And the emails, or the notes that they send to you, the weekly reports, that's also marking your own homework in terms of what some people would say. How would you respond to that?*

TA I think if we had any doubt about the veracity of the information that was being supplied to us then we would take action.

*RH What would you do, if you did have doubts?*

TA We've got regulatory powers, so we can stop the operations if we needed to, we can prosecute or we can issue Improvement Notices, which are legal documents requiring the operator to manage the risks in a more appropriate way.

*RH In this industry the companies are quite small, even the big companies are quite small so a lot of the work is sub-contracted. So when you have your initial meeting, and you're collecting your intelligence about them, how does it work if most of the operations are going to be contracted out to the sub-contractors.*

TA It's part of the notification. We will understand which subcontractors are being used –

*RH And assess their experience?*

TA Exactly. And there is a legal requirement in the Borehole Sites and Operations Regulations for the operator to do a similar audit to ensure that the people they are contracting are competent.

*[25:15] RH Can we look at some worst case scenarios? What role does the HSE play in planning for emergencies on oil and gas sites?*

TA There is a requirement in the Borehole Sites and Operations Regulations for the operator to produce an emergency plan for the site. As part of our site visits, or as part of our other inspections, we may inspect the Health and Safety document which includes the emergency plan.

*RH And what are the geographical limits of that emergency plan?*

TA There are no geographical limits set down, so it's a risk-based thing, the operator needs to think about the impact and plan accordingly. Sites should be located and be of suitable size and layout so as to allow hazards to be confined within the site boundaries. Safe separating distances and, where necessary, fire breaks should be provided between hazardous zones on the site and external premises and public rights of way.

*RH So would it include evacuations, for example, of neighbouring homes?*

TA If they thought that was appropriate, yes.

*RH You say you would assess their emergency plan.*

TA We can do, yes

*RH What would happen if you didn't think it was acceptable or appropriate?*

TA Again, we would be looking at what enforcement action might be appropriate at that stage.

*RH And who would do that? Would that be your well inspectors, or would that be your central office staff?*

TA It would be a combination of people I would imagine. It depends. We have a number of people who are very competent in that area.

*RH Have you ever been unhappy about an emergency plan on an onshore oil and gas site?*

TA Not that I'm aware of. If we'd taken any enforcement action, that would have been made public, and I'm not aware of that happening.

*RH And what's the level of compliance like generally in the onshore oil and gas sector?*

TA I can only talk about the last few wells that have been drilled and we haven't felt the need to formally enforce on any of those projects as yet.

*RH And going back over the past ten years, is that a good record?*

TA (quotes from the HSE Onshore Oil & Gas Sector Plan) 'The wider onshore sector has demonstrated a high level of control of major accident hazards.'

*RH Is the compliance data published?*

TA No

*RH Why is that?*

TA Because we publish by exception. If we take action, then that is published. We don't say "this company is great at Health and Safety" -

*RH But you might say, this one has not complied with the regulations.*

TA Yes

*RH Could you give me an example of what you could do if they didn't comply. What is the kind of process if they don't comply?*

TA It depends what the non-compliance is

*[28:20] RH Starting with a moderate level...*

TA We can give verbal enforcement, so we can say to the operator, we want you to improve this in this area. We can give a written enforcement letter. We can give a formal Improvement Notice, which is a legal document which says you must improve in this area by a particular date. We can give a Prohibition Notice which says you can't do x, y or z, including we can shut the operation down completely if we thought people were at risk and if the regulations aren't being complied with we can prosecute. HSE inspectors have powers to enter work premises at any time, should they need to.

*RH And have there been any prosecutions in the last ten years of onshore oil and gas operators?*

TA Not of onshore oil and gas operators, no. Not that I'm aware of.

*RH Do you have any role in emergency planning generally for people living round oil and gas sites – not the emergency plan for the site itself, but emergency planning by the services like the police or fire or the health services?*

TA We will liaise with the emergency services and the local authorities if we're approached. We do have a role around emergency planning with COMAH {Control of Major Accident Hazards} sites: chemical sites where they store large amounts of chemicals or fuels, but oil and gas sites are not generally COMAH sites so we will assist if we are approached.

*RH Have you been approached recently?*

TA Not to my knowledge.

*RH Have the Local Resilience Forums been in touch with you about the fracking sites, for example, or the big oil and gas sites?*

TA No. Although we have liaised with the Local Authorities, so the people on the Local Resilience Forums know who we are.

*[30:28] RH There's some research done by ReFINE, and it's based on data from Texas and Colorado, which suggested that the UK would see one onsite spill for every four large shale gas pads. What's your view of that prediction?*

TA I don't really have one, to be quite honest. Onsite spills are mostly for the Environment Agency.

*RH But it could result in fire or explosion presumably?*

TA It depends on what spills.

*RH Are spills not a major concern for you?*

TA It really depends on what chemicals are onsite and how they are being handled. If there is acid onsite, things like that, that would be a concern for us, but the lead regulator for spills is the Environment Agency.

*[31:30] RH Thinking about what is onsite, the oil sites for example in the South will be storing quite large quantities of oil presumably, because they are going to store it before they tanker it off.*

TA If you're talking about the newer sites, it's possible certainly with flow testing, things like that. If they're storing large amounts of crude oil onsite then they may come into COMAH.

*RH That would put them into a different category?*

TA Yes

*RH And the gas sites – there are some gas sites that are condensing the gas I think would that again put them into a different category?*

TA Not necessarily.

*RH Does the HSE look at the United States, particularly in terms of their fracking experience? Have you learned anything from the States about how we should regulate here and how you should work?*

TA We have got contacts in the States, and in Canada as well. We do regularly speak to the regulators from the US and Canada.

*RH What sort of lessons have you learned from them?*

TA I think what we've learned is that the regime that we've got is robust. The key learning for me was that the regulators I have contact with in the States don't have the level of experience of our inspectors. That gives us a big advantage as we are taking people from out of the industry and then training them to be inspectors which I didn't see in the US

TS The variation is probably huge over in America though, isn't it.

*RH From one state to another?*

TA Yes, that's right.

*[33:50] RH I think one of the big concerns people have is the fear of something major happening, like a well blow-out. Has there ever been an onshore well blow-out in the UK?*

TS Hatfield Moor near Doncaster, I think 1981. Before HSE had responsibility for regulating the industry, but I think that's the only one I'm aware of.

*RH And what actually happens when a well blows out?*

TS A blow out is when the well kicks – that is an influx from the rock formation is taken into the well as the hydrostatic pressure from the drilling fluid is insufficient to keep it out of the well. If the kick is not detected by the rig crew and the well shut in on the blow out preventer, then it continues to flow into the well until the hydrostatic pressure from the fluid column in the well is completely overcome and the well flows to surface in an uncontrolled manner.

As far as I recall, at Hatfield Moor they hit a pocket of shallow gas. Whatever went wrong, they didn't have the requisite well integrity that we would expect these days. It found a source of ignition and I think it burnt for the best part of a month before they got a well kill team in.

*RH What is the process if a well is found to be live? What does that mean? Sometimes operators will say that they've discovered they have a live well. Can you explain what that means?*

TS I don't know what they mean by that. In what context did you hear that?

*RH It was described as an emergency because a well was found to be live, so it was used to justify 24-hour operations because the well was "live"*

TA So you are talking about Brockham? The side track at Brockham?

TS They must have been working on it, as opposed to it being in production. A well they've gone back into.

TA I know what you are getting at now. As far as I can see, the well is either live or suspended, I think that's what the terms are you were looking at.

*[36:25] RH So if it's live, what does that mean?*

TA It means there is pressure in the well.

*RH And if it's suspended?*

TA The pressure is equalised. They suspend the well by equalising the pressure. Or they can suspend the well by having mechanical plugs in the well, a kill fluid and some sort of cap on the well or a valve assembly known as a Christmas tree left in place. Depending on the type of plugs in the well this can be pressure retaining or not.

*RH If an operator discovered a problem, things aren't going according to plan, what are their responsibilities under the regulations?*

TA Their primary responsibility is to ensure there is no unplanned release of fluids from the well. That could be gas or liquid. That's the number one responsibility because if they can do that then that means there isn't a risk of fire or explosion.

*RH And do they have any responsibility to report that incident to you?*

TA Yes. Failure of any safety-critical element of the well is reported, even if there isn't an actual release of fluids from the well.

*[37:28] RH What does safety-critical mean?*

TA It means the failure of any barrier basically. A casing failure, or a failure in one of the valves at the top of the well, anything of that sort, or they have to deploy their blow-out prevention equipment. The regulations (RIDDOR) describe this as the mechanical failure of any part of a well whose purpose is to prevent or limit the effect of an unintentional release of fluids from a well or reservoir being drawn on by a well or whose failure would cause or contribute to such a release. The use of the BOP [blow out preventer] is described in the regulations in this context as 'the coming into operation of a blow-out prevention or diversion system to control flow of well-fluids where normal control procedures fail.'

*RH How do they report it? Do they have to do it in a written notification, are there forms for it?*

TS They would have to, but in the first instance they would probably phone us.

*RH And do they have a time frame in which to report this?*

TA Yes, it's set out in the Regulations. They must report it by phone as soon as reasonably possible and then they have 10 days to send in the requisite form, which can also be completed online.

*RH Would it be possible for an operator to drill a well without telling you? Or a sidetrack?*

TA I would be very surprised. If they didn't supply notification, it would certainly be a contravention of the Regulations.

*RH What about more routine work? Do they have to tell you if they are doing maintenance on a well?*

TA Yes, any work that could lead to an unplanned release of fluids has to go through that same process.

*RH So quite minor things?*

TA If they go into the well in a way that could result in any type of leak from the well then, yes, they would need to give us a notification first of all and supply weekly reports as well.

*[39:12] RH So that would include doing a sidetrack for example?*

TA Most definitely.

*RH And would it include cleaning a well?*

TS Depends what type of cleaning they're doing.

*RH And does that depend on the volumes and the pressures that they're using?*

TA No, it depends on the techniques that they are going to use. If they're doing anything that could lead to an unplanned release, then yes, they will report it to us.

*RH Did Angus Energy tell you they were drilling a sidetrack?*

TA Yes.

*RH Did you have any responsibility for checking that the operator had complied with other permissions and consents?*

TA No.

*RH So, unlike the OGA which is supposed to say everything is in place before operators can go ahead, all you are concerned about is being notified and that they are complying with that notification?*

TA Yes. And in fairness, if you look at the legal position between the council and Angus, then that's obviously a complex area and asking our inspectors to make a judgement on whether planning permission is required or not I think would be unfair.

*[40:33] RH I'd like to talk about the overlap between the regulators and possible gaps in the regulation. You share information with the Environment Agency and the Oil and Gas Authority?*

TA Yes.

*RH How does that process work – your sharing of information?*

TA It can happen in a number of ways. If you look at a particular site, our inspectors and the Environment Agency team will be able to contact each other on an ad-hoc basis. We may well have regular teleconferences or meetings with Environment Agency colleagues depending on what activity is going on at the site and we may do joint visits. So, for example, the visit that Trevor went on a couple of weeks ago was a joint visit with the Environment Agency.

*RH Where was that?*

TS Preston New Road.

*[41:40] RH Is it like a memorandum of understanding with the Environment Agency.*

TA We do have a memorandum of understanding that covers all of our activity with the Environment Agency and we have a Working Together agreement with them that is specifically around onshore oil and gas.

*RH Do you have anything similar with Mineral Planning Authorities?*

TA No, but we have a stated commitment to support Mineral Planning Authorities through the planning process.

*RH And are you a Statutory Consultee?*

TA No, we're not.

*RH What level of contact is there between you and individual Mineral Planning Authorities?*

TA That's really up to them. We've never turned any of them down for any level of support.

*[42:33] RH So they come to you, rather than the other way round?*

TA Exactly. If you want an example, up in Lancashire at Preston New Road, before Cuadrilla put their planning application in, we met with the mineral planners, we had meetings with the council – the elected officials themselves - and that process went on right throughout the planning application.

Similarly, in North Yorkshire, where Trevor was at the planning hearing, and I was at the one in Lancashire, so we can offer quite a lot of support to the Mineral Planning Authorities, and we have done, but it's up to them to approach us. Each Mineral Planning Authority is different, they have different levels of experience. Some of them want us there more than others might.

*[43:38] RH Do you meet with the different agencies at senior levels?*

TA We have meetings with the Inspector teams, right up to Chief Execs.

*RH So the Oil and Gas team from the Environment Agency, would you get together with them from time to time?*

TA From time to time, yes.

*RH How long has that been going on for?*

TA For oil and gas, I don't think it's anything new.

*RH How often would you meet at that level?*

TA If you're talking about the whole group [of inspectors] meeting, maybe once a year.

*[44:35] RH And how often would you, and your opposite number at the Environment Agency Oil and Gas team get together?*

TA We do have regular face to face meetings with the Environment Agency, normally several times a month.

*RH And what sort of things come up at those meetings? What are the key issues that being discussed between you?*

TA We discuss the engagement work that we do, we discuss following concerns that have come in, Freedom of Information requests. We share information on a lot of things.

TS Progress on the site, what's been happening.

*[45:40] RH You said Freedom of Information requests. So, someone puts a Freedom of Information request into you, is that for your correspondence with the Environment Agency, or your links with the Environment Agency –*

TA Sometimes it is. I say we discuss these things, but we wouldn't share names and addresses of the people who are doing it, so we do comply with data protection and things like that.

Many of the concerns we receive from people, and indeed the Freedom of Information requests, go across the border if you like, so they concern both us and the EA, and it's very appropriate that we discuss them.

*[46:35] RH I was interested in how you apply UK standards to imported equipment. We don't have a very big onshore supply industry at the moment and so companies are importing equipment. Ineos bought some equipment from Poland as an example, and I know there was a rig used in East Yorkshire that I think came from Canada. Is that your responsibility – checking that the equipment is up to standard?*

TS You won't be surprised to learn that there are regulations that cover it, principally the Supply of Machinery Regulations and so we'll check that they've got the appropriate marking. Most of it will be ISO and API [American Petroleum Institute] registered anyway, so they're fairly good international standards.

The machinery should have a CE marking, indicating that it meets all the relevant, essential health and safety requirements. That means making sure that it's got the right sort of user instructions, that compliance been achieved and it is technically fit for purpose.

HSE are not a standards body but, similar to some of the things Tony has already described, we worked with the bodies that discuss these things. CEN [European Committee for Standardisation], ISO [International Organisation for Standardisation], BSI [British Standards Institute].

But the responsibility rests with the operator and it's not our job to go on there and say whether or not this is appropriate, they have to justify it to us, so we say if you want to perform this activity, is

that piece of equipment suitable for it, is it rated in the right way, because obviously if it's a potentially explosive atmosphere, it's not just the equipment, it's other things as well.

A lot of equipment would also have to be ATEX [Explosive Atmospheres] rated to make sure they've got the right sort of equipment and they're not having a source of ignition.

*[49:13] RH So if a piece of equipment was found not to conform, how would that happen?*

TS If you're talking about the Rathlin case, the document had been more or less completed but hadn't been signed off. So strictly, it wasn't in scope, but the fact of the matter with that would be our inspectors had turned up, had a look at it, so if they had found any problems then they would have taken some action. But with that one, I think someone said, "You might want to get the paper work sorted".

TA And that's absolutely proportionate, which is what we aim to be, a proportionate regulator. As Trevor said, HSE Inspectors went to the site, they found that they hadn't completed the paper work but the equipment itself was fit for purpose.

*[50:03] RH And whose responsibility is it to ensure that equipment remains in an ongoing good state?*

TA The operators.

*RH And what checks might you and your team carry out to check that what they said is true?*

TA They do two types of checks. The first check they do is they look at the equipment itself to see that it was in good condition and then secondly they would look at the maintenance regime that's in place for the operator.

TS They'd be looking at the conformity assessment. There is a responsible person, someone who is competent to rate these things. Manufacturers have to declare the product's conformity and demonstrate that the equipment meets all essential health and safety requirements. This will include comprehensive user instructions and how compliance has been achieved in a technical file. Procedures are signed off by individuals and you can trace back the professional standards these people are supposed to be abiding by, so if you are in breach of something, that's quite a serious offence.

*[51:10] RH I'm playing devil's advocate here, but you've got two hundred onshore oil and gas sites, goodness knows how many rigs out in the North Sea, and you've got ten inspectors. How often might equipment be spotted by a well inspector on an onshore oil and gas site?*

TA They're not a big team, but it's not our job to be on every site all the time. The regime that we've got, the notifications, the operations reports, the scrutiny of each well at key points during the activity that's taking place on it, what we do at the beginning and continue to do throughout with building intelligence about each of the operators gives us a level of assurance that these things are being done in the right way.

*[52:15] RH Are you confident that the regime would catch declining quality equipment or faulty equipment?*

TA Yes, I am confident. When an operator provides a notification to us, then they have to provide details of what equipment they plan to have on site. Most of the equipment is contracted in, so it's not only the responsibility of the operator to ensure that equipment is fit for purpose, it's also the responsibility of the contractor. We know those companies too and where we do have doubts that will take more of our inspection activity.

*[53:12] RH So, if you came across some problem, that would mean you would put more effort into looking at that operator or that site?*

TA Exactly. Or that contractor.

*RH Finally, I'd just like to look at transparency and accountability. Which is HSE's parent department?*

TA Department of Work and Pensions.

*RH What democratic input is there in the HSE?*

TA There's an Executive Board. It's a tri-partite organisation, so it's made up of people from Unions, from industry, from Local Authorities. They oversee our activity.

*RH Are the Local Authority representatives elected members or officers?*

TS We've had both at various points. I'm not quite sure at the moment.

*[54:17] RH How would the public hold HSE accountable.*

TA We have a minister who's responsible for us.

TS We quite often have to attend and give evidence to Parliamentary Select Committees.

TA We're accountable through the Minister, we're accountable through the Board, and we publish our Regulatory Frameworks, how we regulate. People have the opportunity to look at that and if they don't think we are doing what we say we are going to do, then they've got the opportunity to hold us to account.

*[55:00] RH You've been doing a lot of these "Meet the Regulator" events with the Environment Agency. What do you want to get out of it? Why do you go as an organisation?*

TA These sites are obviously controversial, people are worried in some areas, and we want people to understand that we have got a good Health and Safety regulatory regime that is effective.

TS It's also fair to say that we probably felt, as an organisation, that people didn't fully understand how our regulatory regime works. If people wanted to find out, they could go on our website and find out, but people haven't got the time to do those sort of things.

*RH What's your view on the idea of a single regulator that came up last week in the Written Ministerial Statement?*

TA We think that we've got the right regulatory approach. We will work with the government. That's their stated policy and we will work to help them achieve that but to make sure that the regulatory regime remains robust.

*[56:38] RH But you're satisfied with the current system?*

TA Look at it this way. Great Britain is one of the safest places to work in the world. I think the Health and Safety at Work Act, which brought HSE into existence has played a large part in helping to make Great Britain by and large one of the safest places to work in the world. The regulations that we've got in place under that Act, in lots of sectors including this one, have got a proven track record of being effective.

*[57:10] RH And the people who come to the Meet the Regulators Roadshows, who come and talk to you, they're not employees are they, they're not the people who are going to working on the sites.*

TA They vary.

*RH How do you reassure the people that come to Meet the Regulator events that, first of all, the operators are going to do what they say they are going to do and that the health and safety of the site is going to be extended to where they live, because some people are actually living really close, three hundred metres away, what do you say to them to reassure them that things are going to be fine?*

TA We have very similar discussions to the one we've been having today to explain how we actually regulate rather than just explain what the regulations say. By explaining how we regulate, we are able to demonstrate that we have got a robust regulatory regime.

TS I think it's also about the reputation that HSE has as a national regulator in every other sector. I think if you were to ask, most people would say that HSE does a good job, that's what I've always found. So the public should not feel that we would be any less vigilant with this industry than we are with other hazardous sectors.

TA This is important to us, that we are able to go out and explain to people the good job that the inspectors do.

*[59:03] RH How close should a fracking site be to houses from a health and safety point of view?*

TA We take a risk-based approach so we don't have a set-off distance. It says in the guidance that we produce for the Well Sites Operations Regulations that the operator should aim to contain the health and safety risks within the site.

*RH So there could be one next door, up against the boundary?*

TA If the risks were managed appropriately, we wouldn't require a set-off distance.

*RH Would you live within 200 metres of a fracking site?*

TA Put it this way. I know the people who regulate these sites and I trust them to do a good job, and that's the best I can say.

*RH (to Trevor) How about you? Would you live within 200 metres of a fracking site?*

TS I think my answer would probably be the same as Tony's. I think there would be some noise and disruption during the construction phase, but in terms of regulating it once it's in production, no, I think our folks would regulate adequately and I wouldn't have a problem.

I know there are some wells in this country that do have housing very close and actually the housing grew up after the wells are already there, so I think people were reassured that everything was being done safely.