**Video Transcript**

**Community Information Session - Minerals exploration**

[Slide: Community Information Session - Minerals exploration in south central Victoria]

*Annie Farrow*

Ladies and gentlemen, good evening.

Thank you for joining the Department of Jobs, Precincts and Regions Community Information Session with regard to minerals exploration in the Daylesford, the Gisborne, Macedon and Bacchus Marsh areas.

Before I start I would like to pay my respects to the traditional owners in the area, that includes the Dja Dja Wurrung, the Taungurung, the Wadawurrung and the peoples on the Kulin nation, I pay my respects to elders past, present and emerging.

We have some great information to share with you to help you understand minerals exploration in your area, how it is regulated, and the opportunities for you to have your say.

Tonight we will hear from Ross Cayley who is a geologist who works for the government’s Geological Survey of Victoria.

Following Ross you will hear from Laura Helm who is a director with Earth Resources Regulation.

This is the body responsible for enforcing the regulations which govern what explorers can and cannot do under the Minerals Resources Sustainable Development Act.

I know many of you will be eager to hear about minerals exploration in light of the VEAC report.

I will address that specific issue just before we go to question time.

Before we get started I have a few housekeeping items I want to share with you.

During tonight’s event all participants will be in listen-only mode.

We have allocated about 20 minutes to address questions at the end, and priority will be given for those questions which were submitted at the point of registration, and those questions which were asked frequently.

We will also take one or two questions from a live question, and if you go your screen now you will see up on the right-hand corner a Q&A tab.

It looks like a dialogue box with a question mark on it.

So please check if you can see that now and the Q&A screen will appear on your right-hand side.

Simply type your question into the dialogue box at the bottom and click the send button which sort of looks like an arrowhead.

Please be sure to address all questions to all panellists.

Now if you’re having difficulty at any time hearing or seeing the presentations tonight, please note that registrants will receive a link to the recorded session in coming days, and this also serves as a reminder that this session is being recorded.

Now we’re unlikely to be able to answer all questions tonight, but we have committed to providing a written response to all questions on the Earth Resources website.

Now those questions will not identify the author, please note that the questions that were submitted, this is a community event where our focus is community members, so we welcome the participation tonight of some of the exploration companies, but we will be addressing those questions posed by the explorers through our normal communication avenues, so the focus is on the communities.

Now just to crossover to the agenda for tonight, we have Ross Cayley from the Geological Survey of Victoria, he will talk about why is there so much interest in exploration in this area, and why is there so much exploration interest now.

He’ll also talk about what does that exploration actually involve, so you get some kind of sense of the extent to which is actually not that ground-disturbing, and he’ll also talk about mining pathways.

Then you’ll hear from Laura Helm with the Earth Resources Regulator, and she will talk about the processes for licencing minerals explorers, the processes as they stand for current exploration applications, and those that have recently been granted, and she’ll also talk the safeguards that really govern the behaviour of explorers around those things that communities generally feel are important, special places, special things such as native vegetation, flora and fauna.

So I might now go straight into Ross if you’d like to commence your presentation.

*Ross Cayley*

Thanks Annie.

Good evening everyone, let’s get underway.

So, my name is Ross Cayley, I’m a Senior Geologist with the Geological Survey of Victoria.

[Slide: Ross Cayley talk outline]

A bit about me, I grew up in rural Victoria, now I live in Melbourne, it’s a good central place to look at all the rocks of the state.

I’ve worked for the Geological Survey of Victoria for 30 years and so my role is a scientific research role, so my brief is to understand the geology of the state so that better and more informed management decisions can be made about it.

So this is what I’m going to talk about so let’s dive in.

[Slide: Who are we? - Geological Survey of Victoria]

First step, who are we, who is the Geological Survey of Victoria?

Well, it’s the Victorian government’s geoscience agency.

All state governments and the federal government support geoscience agencies, and one of the reasons for that is because under Australian law the minerals are owned by the Crown, so that means that the government owns the minerals and the wealth on behalf of all of us.

So it’s encumbered on government to maintain an inventory of its mineral endowment just like any other asset.

So the Geological Survey is responsible for understanding the state’s geology, and we do that by undertaking science investigations, we do geological mapping, we collect and collate and analyse data, and we try and build knowledge about the state.

And it’s not just for mining, we also operate and understand geology for groundwater, environmental management, geoscience safety and various other aspects as well, and soils and that sort of stuff.

So when you put all this together it’s an evidence-base of geoscience knowledge that’s continually improving and it’s available to everyone, government, industry, academia and the wider community.

And this enables the most informed and responsible management of the state’s owned resources that are possible.

Now because we’re all public servants all this data and knowledge is owned by all Victorians, it’s all available for no additional fee for everyone to use and it can be accessed and viewed online.

[Slide: Who are we? - Why the current mineral exploration interest in south-central Victoria?]

So this is the question that probably everyone is on the tip of everyone’s lips at the moment, why is the current – so that why the current mineral exploration interest in south-central Victoria, and at Daylesford, Hepburn and Wombat Forest area.

Well, there’s a couple of answers to that.

[Slide: The mineral exploration interest has always been there]

One of the answers is that the mineral exploration has always been there, the geology of the Wombat/Daylesford/Hepburn region is the same as at Bendigo, Ballarat, Castlemaine, Fosterville, all these are historic, significant historic goldfields, this region therefore has gold discovery potential.

Of course all the significant discovered goldfields were discovered because the gold-bearing reefs and shoots were sticking out of the ground at surface, so you didn’t have to understand the geology too well to find those ones, most of those have probably been found.

[Slide: Map of the eastern coastline of Australia]

Now just to put it into a bit of context, a really simplified geology map of the whole of eastern Australia, and it shows the region called the Tasman Fold Belt System.

So all those coloured in rocks are where there’s older bedrock rocks that host the type gold that we’re talking about today at the surface, the grey [inaudible] are cover rocks on top.

Now you can see the distribution of all the yellow dots there, they’re the big major gold deposits of eastern Australia, the size of the dot corresponds to the size of the gold deposit.

Now what’s interesting about eastern Australian geology is it trends north-south and the geology of far north Queensland, those blue rocks, very, very, similar to Victoria, and NSW are the same.

Despite the geology being all [inaudible] it’s really only central-west Victoria that has proven giant orogenic gold deposits.

This suggests that something really interesting is happening in this part of the world, and as geologists we try and work out what that is.

It’s been real challenge to understand it.

Let’s zoom in on Victoria.

[Slide: Gold in Victoria]

This is a simplified geology map of Victoria.

Most of the map’s rocks are coloured yellow, they’re the younger cover rocks sitting on top, and the older purply and blue rocks are the older bedrocks that host gold deposits underneath poking through.

The main goldfields of the state which we know about, and which were important when gold was first discovered in 1851 through to the sort of turn of the 20th century, they’re those yellow polygons.

So I’m just going to give you a few statistics.

The total all-time goldmine globally in the whole of human history is recorded at around about 200,000 tonnes, and Victoria has actually contributed about 1.5% of that world total all-time gold production, but from just such a tiny land area, the goldfields are about 0.03% of the global land area.

So what that means is that Victoria’s goldfields are really significant.

They’re about 100 times richer in gold production than the global continental average, so that’s something that’s really put Victoria right on the map, that’s where Marvellous Melbourne came from back in the day.

Let’s zoom in onto the goldfields geology.

[Slide: Simplified geology map of Victorian goldfields]

So this is another, slightly more detailed but still very simplified geology map showing different rock types, and the major black sort of lines there are faults that separate different areas.

Now in order to understand and talk about geology, geologists tend to subdivide different bits of the ground into areas with common geological attributes.

And in this case they’re called zones.

So we have the Stawell Zone in the west named after Stawell.

The Bendigo Zone in the centre of the map named after Bendigo.

And, the Melbourne Zone is obviously named after Melbourne.

There are other zones, I’m not going to talk about them today.

The green and orange coloured polygons are the known goldfields.

This is where gold-bearing ground was discovered sticking out of the ground at the surface.

Now the Daylesford/Hepburn/Wombat Forest area sits within the Bendigo Zone, and you can see there’s a few known goldfields in there already.

Daylesford was quite a large goldfield, slightly smaller ones occurred at places like Blackwood.

And they’re all sitting in this geology that is trending north-south, so straightaway you can see there’s been a lot of historic gold production from other parts of the Bendigo Zone, actually all of the Bendigo Zone including the bits which are yellow where these Bendigo Zone rocks are buried are of almost equal interest to mineral explorers, because it has the same potential for gold.

[Slide: Mineral explorers have a new appreciation of the size of the prize (Fosterville)]

Now, there is a special clamber for interest in this ground now and it’s because the explorers have rediscovered how big these gold deposits can be, and the deposit that caused that to happen is called Fosterville.

[Slide: Mineral explorers have a new appreciation of the size of the prize (Fosterville)]

So this is where Fosterville is, and the geology is trending north-south so you can see that the sort of area that hosts Fosterville could potentially trend down into the Daylesford, Hepburn and Wombat Forest area.

[Slide: Significant Drill Intersections of 2017]

This is a table showing the best drill hole intersections for any metal worldwide in 2017, and you can see at the top of that list is Fosterville.

So Fosterville made the top of the list with the best intersection in the world because one of their drill holes, at about 350 metres depth, went through an unknown deposit of gold that was running 1500 grams per tonne, and there was 15 metres thickness of it.

This is a world-class intersection and it was the best one in the world that year.

This has got everyone’s attention.

Mineral explorers like to find things like this.

If you’re wondering what those sorts of grades look like it sort of looks like this.

[Slide: Fosterville record drives Kirkland Lake’s best year ever]

So that bottom picture is a photograph of a drill core about five or nine centimetres in diameter and the white rock is quartz and obviously it’s studded with gold.

You can see a hand specimen there in someone’s hand for scale.

So as far as gold deposits go it doesn’t really get any better than this.

And the question is how many more of these sorts of deposits might there be?

We know Bendigo was a world-class deposit as well, there’s certainly more than one.

[Slide: International gold price is at historic highs, demand is at historic highs]

These really good intersections for Victoria are coming off an international gold price that is approaching historic highs, and the reason it’s high is because demand is at historic highs.

Here’s a few graphs and tables that demonstrate that.

[Slide: Graph showing international gold price at historic highs]

The blue graph at the top there obviously just indicates the gold price.

You can see it has been higher in the past just, quite recently, but now it’s approaching those highs again, and it looks like those highs are likely to be sustained into the future.

And one of the reasons for that is that gold demand is at historic highs, and it’s not just for jewellery anymore, gold is a critical metal for use in modern electronics technology, for example the device you’re watching this presentation on today has critical amounts of gold in it that make it function.

And as we become more technologically advanced with renewal energy demands, electric vehicles, all that sort of stuff, the demand for gold is only ever going to grow.

It has to come from somewhere and Victoria is one place you can get it.

[Slide: New geoscience, new exploration technology = new opportunities, more focused, efficient exploration effort]

Okay.

So the other reason that there’s a bit of an interest in gold exploration in Victoria at the moment is we’ve got new geoscience and new exploration technology, and both those things are starting to lift a bit of the cloud of uncertainty that used to sit over gold exploration in Victoria.

With this better understanding comes hope that exploration efforts may be more successful than they have been in the past.

[Slide: New Mineral Systems models - Key commodities (GSV)]

New technology, what does it look like?

Well one sort of key new technology is just better understanding so we can produce better maps with better predictive capacity, that’s where the area we’re talking about today sits on this map of the whole state.

And you can see there we’re looking at geological systems analysis and trying to understand which bits of the state might have potential for different sorts of mineral systems and metals.

The other thing that’s changed is new technology, and the thing about new technology it’s often good in lots of different ways.

So it could be quicker, it could be cheaper, it can actually also have much less on-ground impact and much less impact to other land users.

So an example at the top there is a hand-held x-ray fluorescence gun which gives you real-time geochemistry.

And so in the past to get that sort of geochemistry you’d have to collect a sample, take it away and crush it up in a laboratory.

Today you can point the gun at it and get a reading in a minute.

So obviously you can do an awful lot of surveying really quickly with really low impact.

The other new technology is drone technology which allows you to do rapid airborne surveys which are really controlled and much lower impact in the past.

[Slide: Mineral exploration - what is it and how is it done?]

So now we’re getting onto mineral exploration, what is it, and how is it done?

[Slide: Mineral Exploration]

So mineral exploration of an area is a systematic investigation of its mineral potential, it’s as simple as that.

And it typically involves first some sort of new exploration idea, the idea that just because minerals haven’t been found in an area in the past doesn’t mean they may not be there, it just might mean they’re really cryptic or perhaps they’re buried at depth and blind to the surface.

Trying to find gold in particular but also other metals is really difficult if all bearing rocks don’t stick out of the ground, you have to have some sort of geological understanding in order to have a chance of predicting where they may lie at depth and this takes a lot of modern technology.

So once you’ve had your idea, the next step is to try and work out where to apply your idea, and that’s done using an analysis of legacy geoscience data.

So this is something that Geological Survey or Victoria helps with, collating previous data and doing our own research as well.

And mineral explorers might look in that data to see if there’s something that they’ve thought of that might have been missed by previous explorers or perhaps no-one’s even looked there before, and then do a gap analysis, determine what additional geoscience data is required, or new technology might be required to fill that gap.

And then you go out to your area of ground and by this stage you will have applied for an exploration licence, and once you’ve had that licence granted, you’re able to go out on the ground, deploy those new investigation ideas and see if you can find anything.

[Slide: Mineral exploration method lifecycle - 1: Desktop study]

So this is the lifecycle, it starts with a desktop study.

So what I’ve shown here is a selection of reports produced by the Victorian Government and geological maps, and also geophysical datasets so you can actually do a bit of remote sensing of your geology from a distance.

This is usually done in the office, about planning, what you’re going to do when you get out into the field.

[Slide: Mineral exploration method lifecycle - 2: Reconnaissance-scale geoscience investigations]

Once you’ve done that work you move to Stage 2.

Now Stage 2 is really reconnaissance-scale, you’ve taken out an exploration licence but of course if there’s anything it’s likely it’s going to be in a very small part of that total area.

Where is that part?

Well the way to find that out, there’s no real proven way, you just have to use a selection of different approaches to try and get an understanding of the geology.

You can do geological mapping, which will be geologists walking around on the ground looking at the rocks.

You can acquire reconnaissance geophysics [inaudible] using drone-based operations these days, and more other on-ground passive detecting and measuring instruments that might be deployed on the ground.

You can acquire reconnaissance geochemistry, again these days explorers generally prefer using the sort of real-time non-destructive methods because they’re quicker and cheaper and they’re still quite accurate.

And then eventually you’ll start doing reconnaissance drill sampling traverses with better geochemical analysis, and in the past that might have involved drill traverses, it sometimes still does, but it’s now less common because technology is advancing.

[Slide: Mineral exploration method lifecycle - 3: Focused geoscience investigations]

Finally, Stage 3, focused geoscience investigations.

Now it’s important to emphasise that these only happen if you start to find something.

So if the exploration licence holder starts to get some slightly better results in one part of the licence than another, they’ll start to focus in on those better results and try and determine if there’s a potential mineral deposit there.

This will obviously involve more detailed geological mapping, more detailed geophysics, more detailed geochemistry, and that will be an iterative process, zero in to try and see if you’ve got some sort of resource.

Ultimately in Victoria, because we’re dealing with all the deposits that stick out of the ground and are easy to find have probably been found, so if there are mineral deposits they’re likely to be at depth and drilling is always needed to find those.

And then if you do find one you’ll need to do more drilling to try and work out and prove how big it is and the nature of the mineral resource.

[Slide: Will there be a mine, and what type might it be?]

And so finally, this is another question probably everyone’s thinking for the Daylesford/Wombat/Hepburn areas, will there be a mine and if so what type might it be?

[Slide: Most common outcome of a mineral exploration licence in]

Okay.

So one of things that is important to emphasise is that the most common outcome of a mineral exploration licence in central Victoria over the last more than 50 years is that no new mineral discovery is made, and then eventually the licence holders relinquish the licence and they move on to other ground to test other ideas.

The statistics are in, it’s well less than 1% of all exploration licences awarded in Victoria have every progressed to a mining licence, so they’re the sorts of odds you’re thinking of, and it is really difficult to discover hidden mineral resources.

But let’s just assume a mineral discovery is made, based on the current geological knowledge the most likely mineral resource that will be discovered in this region is a high-grade gold resource.

Now we know what they look like in general terms, they have their own unique characteristics, but we understand how they form and the sorts of structures that they are formed in.

These deposits are typically really narrow and deeply rooted, they go down hundreds to thousands of metres deep and they’re often quite narrow.

So because of these characteristics they’re typically extracted using underground mining methods.

So for example the current Fosterville goldmine is an underground mine as are operating goldmines at Ballarat, Stawell and Costerfield.

Now because of the gold rush of the 1850s to 1900s there’s literally dozens, hundreds of small historic goldmines scattered throughout the Wombat/Hepburn/Daylesford area, and at Daylesford there was quite a large mine called the Ajax Mine, they were all underground mines as well.

So that’s a brief sort of summary of what exploration is likely to look like in this part of the world.

And, now I’ll pass over to Laura or Annie.

*Annie Farrow*

Thank you Ross, that was really interesting.

I guess from your presentation I get three take-outs.

One is that there’s a high level of interest in this particular area being driven by prospectivity, by the success of Fosterville, and the surge in the international gold price, but the interest isn’t just around the Wombat State Forest, the Gisborne, Macedon, Daylesford area, it’s actually across the Bendigo Zone, the Stawell Zone and other places in Victoria.

The second point I took away from your presentation Ross, was that exploration is an activity that is selective, it’s iterative, and explorers use many techniques, quite of few of those actually don’t use ground-disturbing techniques or techniques that make a significant impact on the ground.

And the third point that I took away from your presentation was that in the Victorian experience there are very few exploration activities that actually end in a mine, and that if a commercially viable minerals deposit were found there is a very long lead-time, 10 years or more, before a mine would commence.

So thanks Ross, I’ll now ask Laura Helm from Earth Resources Regulation to speak.

Go ahead Laura.

*Laura Helm*

Hi, my name is Laura Helm and I’m a director in the Earth Resources Regulator.

So I’m just going to talk to you today about what is Earth Resources Regulation, who we are, how minerals exploration is regulated.

[Slide: Talk Outline]

What safeguards are in place and where exploration is allowed, and a bit about the exploration licence process.

And then I’ll give you an overview of the current licences and applications in the Daylesford, Woodend and Bacchus Marsh area.

And I’ll also give you an overview of how you can comment on applications and a bit about community obligations and responsibilities on behalf of explorers.

[Slide: What is Earth Resources Regulation?]

So, Earth Resources Regulation is Victoria’s regulator of minerals exploration, but also for petroleum, mining, quarrying, recreational prospecting.

So we have two major roles, one of them is to allocate rights to the Crown-owned resource for the benefit of all Victorians.

And so you heard from Ross that minerals in Victoria are owned by the Crown, so it’s the regulator’s role to assess applications and grant access rights to look for, and then to produce, so extract those minerals.

And we also collect royalties on behalf of the state when they are being produced.

Our role is also about ensuring that activities when they occur on the ground are conducted safely, so that’s about protecting people, property, the environment and infrastructure.

We do that through approvals for work through setting codes of practice and setting other regulations around that.

We also do it through compliance activities.

[Slide: How is minerals exploration regulated?]

So how is exploration regulated?

You heard from Ross about how exploration is targeted.

So exploration can only be done under a licence which is issued under the Mineral Resources Sustainable Development Act.

And the licence areas can be quite large but when it comes down to on-ground exploration activity, the area tends to be very small because it will be more targeted, and as you saw from Ross’ description, it’s around looking at the depth level.

So exploration is carried out under a Code of Practice in the main part, and that’s where they’re classified as low-impact activities.

And to be crystal clear, exploration is all that can occur under an exploration licence, so mining can only be done under a mining or a prospecting licence.

Now exploration is mostly low impact, and you’ve heard about ground mapping, surveying using new technologies, sometimes rock and soil sampling, and also some low impact drilling, these can all be done under the Code of Practice.

And that Code of Practice is available on our website and I’d encourage you to have a look at that if you’re interested in seeing what that sets out, which includes what the obligations on explorers are, but also recommended practice in terms of meeting those obligations.

Now higher impact activities they require what’s called An Approved Work Plan.

So that might include where you’re going to impact on listed species under the Flora Fauna Guarantee Act.

It might be where you’re removing native vegetation above the specified limits in the Code of Practice.

Or, it might be because you’re drilling within 200 metres of a waterway.

Now those work plans they must specify to identifiable risks in terms to the environment, to people, infrastructure and land of the activities you’re proposing.

It must identify the controls you’re putting in place.

And it must also identify the rehabilitation that you’re going to do to bring the land back to an acceptable standard.

Now those work plans they are referred to other government agencies including the Department of Environment, Land, Planning and Water, and they will add water catchment authorities and water authority’s environment protection and so forth, so they will have input to those work plans before they’re approved.

[Slide: Safeguarding special places and features]

Now just to give you a sense of the range of legislation that regulates exploration activities, there’s over 20 pieces of legislation.

The primary legislation is the Mineral Resources Sustainable Development Act, and the regulations that sit under those.

But there’s a whole range of other acts that apply and it must be complied with by explorers.

So one of the primary ones there is the Flora and Fauna Guarantee Act, but there’s also the Environment Protection and Biodiversity Conservation Commonwealth Act, and the acts listed there.

I’ve also brought to your attention there, there’s a range of legislation protecting Aboriginal cultural heritage and native title rights, so there’s four pieces of legislation there, these all need to be complied with before exploration activity can happen.

[Slide: Where is exploration allowed?]

So where is exploration allowed?

It obviously has to be within an exploration licence, but exploration is generally allowed on freehold land and also on Crown land including in state forests.

And there are obligations around notifying the Crown land manager before commencing ground-intrusive work on areas of Crown land including the state forest.

So mining and exploration is prohibited in certain areas across the state, so in particular that includes state parks, national parks and wilderness areas, and these are called unavailable Crown land, and when I show you a map later you’ll be able to see what those areas are.

But you can also have a look on our website, there’s a link for mining licences near me, you can see where all the licences are, applications are, and all the areas that are not available for exploration activity.

[Slide: What is the exploration licence process?]

So what is the exploration licence process?

And, the first step in that process that I’ve outlined here is that Earth Resources Regulation receives and application, so as I’ve explained, unless there’s a licence already over an area, or the area is not available because it’s exempt from a licence in terms of being a national park or another area, then it can be received.

Now, sometimes we have what’s called competing applications and that’s where there’s more than one application received on the same day.

So, where that occurs we do assess the merits of those applications against each other, and then we have the next stage which is accepting the application.

So if there are competing ones, the one with the greatest merit will be accepted.

Once applications have been accepted then the next step is that the applicant must advertise in a locally circulating newspaper and state-wide newspaper, and I’ll talk a bit more about that, but that begins a period of public comment and objection.

So, the latest day of advertising, then there’s a three week public comment period.

Now, at the conclusion of that comment period there is then an obligation to go into the native title requirements where that applies, and so that will be on any area where there’s Crown land where native title hasn’t been extinguished.

So where native title applies then the applicant must enter into negotiations, and that can take between six and 18 months depending on how those negotiations proceed.

So that means that you can see there can be quite a period of time between when the application is first received by Earth Resources Regulation and before we get to the next stage, Stage 6, which is when Earth Resources Regulation assesses those applications.

So it’s at that stage that we look at the licence criteria, and the main criteria here, you must be fit and proper to hold a licence.

Now that includes looking at the directors and office bearers of the company and whether they are fit and proper, so that’s assessing whether they have been banned or disqualified directors, whether they have ever been in administration or receivership and the circumstances around that.

They cannot be insolvent or bankrupt.

They must also provide information around any previous compliance history under the Mineral Resources Act or any other environmental legislation, and those are matters that we take into consideration in terms of making an assessment, and we can do that against a Fit and Proper Person Policy and that’s available on our website.

They must also demonstrate an intention to comply with the Act and genuinely intend to do the work.

The next thing that’s assessed is that they have an appropriate exploration work program, and they must also be likely to be able to finance the work and the rehabilitation of that work.

So, once that assessment is made, if the decision is made to grant the licence, that can be for up to five years, and generally exploration licences are granted for five years, and they are all subject to standard licence conditions.

So, some of the matters that are included in those conditions relate to environmental safeguards.

Some of them are around rehabilitation obligations and requirements to pay a bond before commencing any ground-disturbing work.

There’s also a requirement to maintain public liability insurance to fund the exploration work program, and also in relation to the duty to consult with community.

So, once the licence has run for five years there is the option for a renewal.

There’s one renewal that’s possible making it up to 10 years, and then there’s one further renewal of five years, up to five years, but only in exceptional circumstances.

[Slide: Map of current licences and applications]

So, this map is giving you an overview of the current licences and applications in the Bacchus Marsh, Daylesford and Woodend area.

In the orange you can see, or the sort of beige colour, that is existing exploration licences.

The areas that are dark green are what’s called unavailable Crown land, and the bright green colour is restricted Crown land.

So, unavailable Crown land cannot be subject to a licence.

Restricted Crown land can be subject to a licence but there are very strict controls on what actual work can take place and consents that would be required, so it’s quite difficult to actually explore in that area.

All the other areas you can see different licence numbers over them, are subject to applications for exploration licences.

[Slide: Current applications in local area]

So just here I’ve got an overview of the current applications that were shown on that map, and you can see that they are all at a range of different stages in the process that I described to you before.

So, we’ve got five that haven’t yet been advertised, so they’re still in the receiving phase with Earth Resources Regulation.

We’ve got five that are currently in the native title phase.

And then we’ve got three which are in the final phase which is being assessed for whether they should be granted.

So, in terms of those ones in the final phase, those have already gone through the advertising process and you can see from the dates there that they were between one and two years ago, that was when the opportunity for comment for those was.

There are others that are yet to be advertised, and there will be opportunity for further comment.

[Slide: Have your say]

So those advertising requirements, there’s a requirement for all applications to be advertised in both a state-wide newspaper and locally circulating newspapers, so depending on the area included in the exploration licence application that may be more than one newspaper.

In April this year we did update those guidelines because of a number of regional papers closing, and so now there is also the option where there’s no locally circulating paper, for the applicant to notify all the landholders that are affected directly by communicating directly with them about the application, or in terms of erecting road signs in accordance with the guidelines, and those guidelines are on our website.

All the current licences are also now published – are open for public comment, are published on our website, so you can go in and you can see any licence that’s currently open and the dates when the comments are due, and there’s also a link there in terms of being able to make that comment through an online form.

So all objections and comments must be in writing and they can be either emailed or included on the online form, or they can be sent to a mailing address which is available on our website.

It must include the grounds on which the objection or comment is made, and it must be lodged within 21 days after the latest date on which the application was advertised, and again those dates are all listed on the website.

[Slide: Community consultation requirements]

And so a final note about the community consultation requirements, so the opportunity for comment is there during the licencing process, but there is also a duty to consult that all licence holders have under the Mineral Resources Act to consult for the duration of the licence.

So explorers are required to consult with communities about work they’re proposing to do.

They must share information and they must give community the opportunity to express views about the proposed activities, so we would encourage you to contact the companies where you have an interest and you want more information, go to their websites and ask for that information.

So, I’m going to hand back to Annie now and then I’ll be back to answer some of your questions.

*Annie Farrow*

Great, sorry for that little delay there.

Thank you very much Laura, that was very interesting.

I guess the major take-outs for me during that presentation were that really exploration is generally low impact exploration activity that anything beyond those thresholds are governed by a work plan which has to be approved by the regulator, and often that involves assessments by additional experts from the Department of Environment, Land, Water and Planning and the water agencies.

Another take-out was that there are over 20 Acts which govern the behaviour of exploration companies, so it’s not just the Minerals Resources Sustainable Development Act, but a whole range or suite of environmental acts and Aboriginal cultural heritage acts and land planning acts.

Another key take-out was that the process to be licenced involves about eight steps, and for this particular area that we’ve been talking about tonight, there are about five companies that haven’t even got to the stage yet of having their licence accepted, so they haven’t yet undertaken any advertising but they will shortly.

There are another number of companies who are still going through the licencing process, some at native title, and because of the native title process that can take quite a substantial period of time which means that the advertising may have occurred up to several years ago and they still haven’t received their final determination on whether they’re getting their licence granted or not.

Another take-out is that the advertising period is the formal submission period for communities to make their comments and concerns known, but certainly not the last of those opportunities because exploration companies have the duty to consult for the duration of their licence, they have a duty to consult with communities, then the residents and landholders and local community members are able to contact the licenced exploration company for that entire period and ask questions and expect answers and transparency over their exploration programs.

So thank you very much Laura.

There’s one more issue I’d like to go through before we go to questions, and that relates to the VEAC report.

[Slide: VEAC]

I know many of you are quite interested in what may have happened to that.

As you know, I think it was back in July 2019 that VEAC released their final report into the central-west investigation.

They made a recommendation that there’d be a new national park created by merging Wombat State Forest and Lerderderg National Park.

The report that VEAC made is under consideration by government.

It requires a whole of government response and that’s coordinated by the Minister for Environment, and so is sitting with the Department of Environment, Land, Water and Planning.

The government has not yet made its response to that report simply because more important priorities have emerged as we all know, and there is no timeline for government addressing that.

But, the key question I guess that each of you who have an interest in this will be asking what does it mean for exploration licences that have been granted, or may be granted, over areas of the Wombat State Forest?

What it means, and this comes from the Minerals Resources Sustainable Development Act and the National Parks Act, that if, and I don’t know, but if the area were to be created a new national park, Wombat-Lerderderg National Park, then existing minerals exploration licences would be able to continue.

They will not be annulled.

They would also be able to be either given the opportunity to apply for an extension, as a normal minerals exploration licence is able to do, seek another five year term.

Or, they may seek an application for a mining licence but not only would they have to go through the processes under the Minerals Resources Sustainable Development Act, so the processes that Laura described about minerals exploration licence applications, but there’s also a process for mining applications.

But, they will also have to get approval from the Minister for Environment.

The Minister for Environment may take advice from the National Parks Advisory Council.

The Minister for Environment may impose conditions, and that consent if it were granted, would have to be tabled in parliament.

So there are a lot of ifs there, I’m just laying out what the process is and what would happen if the national park were to be created, and as I said, we do not know that, that answer hasn’t been decided by government.

So we might actually now go to questions, and I’d really like to thank everybody for submitting questions at the point of registration, and submitting some questions online through the Q&A system.

[Slide: Questions]

As I said right up front, we’re not going to be able to get to all questions tonight.

I notice it’s ten to 8:00 now and we have quite a few questions that we wanted to get through.

I also noted at the beginning that there were a number of questions that were imposed by industry and we would rather deal with those questions through our normal industry communication channels.

So Laura, the bulk of the questions are for you.

[Slide: What are the requirements to notify community about drilling?]

And, I’d like to start with the first question.

What are the requirements to notify community about drilling?

*Laura Helm*

Sure, thanks Annie.

So within the licence area the licensee must ensure that all noise generated doesn’t exceed the limits which are set by the Environment Protection Authority under the State Environment Protection Policy.

So the Code of Practice sets that out and it also sets out potential mitigation measures that explorers can take to prevent that noise and to keep within those limits if they’re doing ground-disturbing works.

Now, licensees are expected to identify and consult with communities who are affected by work, that’s part of their duty to consult.

And the Code of Practice currently recommends that residents within 100 metres of drilling are specifically notified about the drilling activities.

But we expect industry to take their community consultation seriously, and so communities should contact companies if you have concerns that explorers haven’t shared information with you about work programs, including drilling, and any noise that you might have heard, because explorers should be transparent about their work and their operations.

And if you’re not satisfied by a response that you get from a company you can always make a complaint to Earth Resources Regulation, and information about how to do that is on our website.

*Annie Farrow*

Thank you Laura.

[Slide: What opportunities will this create for community? What is the community benefit? What data do you have to support this being a necessary venture for the local community?]

I think the next question is actually for me.

So the questions are: What opportunities will this create for communities and; what sort of benefits should communities expect to see and; what data do we have to support whether this support is necessary for a venture for the local community?

So firstly, exploration activity in local economies is quite important to small operators who benefit directly from the service stations selling extra fuel, the local motel selling additional accommodation, local restaurants and cafés selling food to the exploration company’s field staff.

Now it’s not big, we understand that, but nevertheless it is still a real injection into local economies.

The overwhelming majority of exploration programs do not convert into viable resource or mining operations as you heard from Ross.

So the direct community benefits from exploration will likely to remain small.

However, if a commercially viable gold deposit is found and there’s a potential mine, mines bring jobs and investment, not only in the mine itself but also the flow on effects that support a mine.

So just to take the example of Kirkland Lake Gold’s Fosterville mine near Bendigo, that’s created approximately 650 full-time equivalent jobs, and that’s a wages bill in 2019 of over $74 million paid to locals in that community in wages.

And then further in that same year, 2019, Fosterville Gold spent $312 million on goods and services, of which 63% went on purchasing goods and services sourced from other Victorian businesses.

So minerals production in Victoria overall is valued at about over a billion dollars, and obviously the gold sector is the strongest performer.

So basically there are small opportunities that arise from exploration in terms of direct benefits, but potentially quite large ones if we get to a mine.

Laura, the next question is for you.

[Slide: Will there be any long-term impacts on the environment at the sites or surrounding areas? What protections exist for native vegetation?]

So, will there be any long-term impacts on the environment at the sites or surrounding areas and; what protections exist for native vegetation?

*Laura Helm*

So, there were a number of questions about impacts on the environment and native vegetation so I’ll address these.

And, I’m talking about the impact here of exploration specifically.

So the Code of Practice is the first document and that is based on the principle that exploration projects should have little or no lasting impact on the environment.

So the code sets out specifically recommended practice in relation to doing that, and also obligations to ensure that those impacts are minimised.

And so any potentially higher impact activities, as I outlined in my talk, do require an approved work plan.

And the work plan will outline how any risk to the environment are going to be managed, and how importantly the operator will rehabilitate the site as well.

So, I already mentioned that all work plans are referred to the Department of Environment, Land, Water and Planning and other specialist agencies for advice before approval, and that’s to ensure that any potential risk to the environment, land and water in particular, are identified and appropriately mitigated.

And I’ve already outlined as well around 20 laws that apply here, many of them are environmental laws, and they govern where and how minerals exploration can be conducted and how it must be conducted.

So specifically to protect habitats and threatened flora and fauna species licence holders must comply with the Flora and Fauna Guarantee Act.

The Commonwealth Act might apply as well, the Environment Protection Biodiversity Conservation Act (EPBC) it’s known as, so that will depend on the particular species in the area.

So, just as an example, explorers must not destroy, damage or disturb flora or fauna that’s listed in the Flora and Fauna Guarantee Act on public land, so that includes in the Wombat State Forest, without a permit and that must be applied for before any work is done.

Same with native vegetation clearing, the Code of Practice permits a very small amount to be cleared in accordance with the guidelines set out in the Code of Practice, anything more than that then an application for a work plan would need to be applied for.

Now, in terms of the native vegetation clearing guidelines, the same guidelines apply to mineral exploration as they do for any other activity that requires native vegetation to be cleared across the state, and that requires a whole range of things in terms of assessing what’s being proposed, minimising the damage that you are going to be doing, and obtaining offsets for that damage or removal in accordance with the DELWP guidelines.

And of course, everything that’s proposed needs to be assessed by DELWP before it would be approved in a work plan by Earth Resources Regulation.

DELWP can also imposed conditions on that.

*Annie Farrow*

Thank you Laura.

Again, another one for you.

[Slide: Will any of the Wombat Forest be cleared to allow mining? If so, how much will be cleared? Is there a limit?

Will any of the Wombat Forest be cleared to allow for mining, and if so how much will be cleared, is there a limit?

*Laura Helm*

Sure, so just to remember that the licences currently under application in these areas are for exploration only, so at the moment we’re only considering exploration activities.

So, low impact exploration generally allows for clearing of say something like a track, or removal of very small limited vegetation, and that all must be recorded, and all areas must be rehabilitated in accordance with the guidelines for exploration.

So mining is not permitted under an exploration licence, it is a long way off, it would require many further approvals.

So the footprint of any proposed mine and the environmental impact of that would be a part of the mining application and the planning approvals process that would surround that.

So existing mining licences, and there are a few, they’ve very small in the Wombat State Forest, they have a very small footprint and you can see that if you have a look at the map on the website.

And as Ross’ presentation outlined earlier, if there were to be a mine proposed in this area it is likely, from our current understanding, that it would be an underground mine, so that would mean that the surface impacts would be much less, but again those would all be assessed through a process that could even be subject to an Environment Effects Statement which is something that can be required by the Minister for Planning and again that involves community consultation as a part of that process as well a significant amount of technical and other studies.

[Slide: In recent years two exploration licences were withdrawn in the Macedon Ranges (Macedon Resources 2018 and Syndicate Minerals 2020). Both had significant public petitions against them. Is this why mining was halted in these instances and, if so, why haven’t exploratory licences been revoked in the Wombat State Forest after the recent No Wombat Gold petition of over 5,400 signatures?]

So the next question is about in recent years there were some or two exploration licences that were withdrawn and the question was around why haven’t other exploration licences been revoked, and mentioning a petition that’s been circulating around that.

So the withdrawal of applications is not a decision that’s made by Earth Resources Regulation, it’s one that’s made by the applicant, so that’s something that’s discretionary and that occurs, it was a decision that was made by the applicant for those licences.

We do provide all the objections and copies of those to the applicant and so that is a decision for them if they want to proceed with that application or not.

So minerals exploration is currently permitted on Crown land and that includes the land in the Wombat State Forest and Earth Resources Regulation is tasked to assess and approve applications in line with the current requirements of the Mineral Resources Sustainable Development, and that considers what land is available or is unavailable in accordance with the current law.

[Slide: What are the criteria for mineral exploration? What is the process to apply for commercial mining licence?]

So the next question was around the criteria, so minerals exploration, and what is the process to apply for a mining licence.

So I’ve talked already in my presentation about the criteria for a minerals exploration licence, so that was around fit and proper, having an appropriate work program, and being likely to be able to finance the work and rehabilitation.

Those requirements also apply for a mining licence but importantly the process for a mining licence is, as you would expect, much more complex and typically takes several years to complete.

So the main difference is that it also requires evidence that there is a mineral resource there, so that’s a mineral deposit that is economically viable to mine.

And community have another opportunity to comment and object on a mining licence application, so that is considered a completely new application, and that application also has to go through the native title and other processes as well.

So mine planning involves detailed environmental, heritage, land planning, water, other approval processes and assessments, and these require detailed studies to be undertaken by the company to assess the potential environmental, social and economic impacts.

Now it’s possible, and probably likely, that environment affects assessment would be required if a mine were proposed, and that’s often described as the EES process.

Now this is a decision though for the Minister for Planning and extensive consultation with community is required, and that’s either through the EES process or if an EES is not required then a planning permit process.

And members of the public have opportunity to make submissions during those processes.

So Annie has outlined some of this, but experience shows that it typically takes around 10 to 15 years from the time that a mineral deposit is discovered to actually becoming an operational mine, so this is the timeline in terms of doing all the relevant studies and meeting the regulatory requirements as well as attracting investment to support funding of the project.

And Ross has already mentioned that around 1% of exploration projects in Victoria have typically progressed from an exploration licence to a mining licence.

*Annie Farrow*

I’m back on now Laura.

Are we continuing on with questions?

*Laura Helm*

I have just lost control of the screen.

*Annie Farrow*

Sorry folks please bear with us, I lost complete control and I was just off, I had to re-join.

Okay, I think Laura we got to that one, yes, so can you please explain the various bodies that exploration licence holders need to work with in order to get a work plan approval?

[Slide: Please explain the various bodies that exploration licence holders need to work with in order to get work plan approvals]

*Laura Helm*

Sure.

So our process includes an initial site meeting where the explorer will outline what their proposed work is, and agencies that have an interest and expertise on their work and the application will be invited to that meeting, and they provide guidance on requirements.

Now these agencies and regulators can include councils, catchment management authorities, the Environment Protection Authority, Department of Environment, Land, Water and Planning and other government departments.

So as explorers are preparing their work plans they must consult with these agencies as they go through, then Earth Resources Regulation also refers the application to the agencies for their comment before any work plan is approved.

*Annie Farrow*

Thanks Laura.

I think that the next question is actually for me.

[Slide: Why are exploration licences issued in water catchments?]

If you’d like to move to that one it’s how will minerals exploration in this area impact the Dja Dja Wurrung?

[Slide: How will minerals exploration in this area affect the Dja Dja Wurrung? What opportunities will this create for community?]

And, what opportunities will this create for the community?

So as Laura explained previously, before a licence can be granted applicants must go through a future acts assessment under the Commonwealth native title process.

In this case Dja Dja Wurrung has a Recognition Settlement Agreement with the state, so exploration licence applicants can agree to the Land Use Activity Agreement which sits under the Recognition Settlement Agreement, and although the exploration company can also choose to negotiate something different if that’s suitable with the Dja Dja Wurrung, the benefits of this is that exploration for the Dja Dja is that they will receive payments under Schedule 4 of the Land Use Activity Agreement.

So there’s a schedule which lists a whole lot of exploration activity and the payment that the exploration company must make to the Dja Dja Wurrung Clans Aboriginal Corporation.

And as general members of the community Dja Dja Wurrung clans will benefit from any expenditure and investment and jobs made from the activity.

The next question is for – did I skip one?

You might want to go back, sorry Laura.

That was in relation to – I wanted to give you a break.

*Ross Cayley*

Annie and Laura, just to kick in for a minute, just keep your eye on the meeting chat that’s all.

Thanks.

*Annie Farrow*

Okay.

[Slide: Why are exploration licences issued in water catchments?]

So Laura, why are exploration licences issued in water catchments?

*Laura Helm*

So exploration licences typically cover large areas which I explained earlier, and this may include water catchments.

So the protection then are around what work can take place and where that occur.

So ground-disturbing works, so in particular drilling, can only take place within 100 metres of a waterway where the explorer has permission from the relevant water authority.

So there are strict regulatory controls around, under the Water Act, the Mineral Resources Sustainable Development Act, in relation to drilling and also around groundwater protection.

*Annie Farrow*

Great, thank you Laura.

I think the next question, we’ve been through that one, so yeah.

[Slide: When mines close to Melbourne are regularly stopped, is it not time to designate mining free zones?]

So the next question is when mines are close to Melbourne and they’re regularly stopped by community decent, is it not time to designate a whole area a mining free zone.

Look, the government recognises that all land is subject to competing interests from time-to-time, agriculture, tourism, minerals exploration and residential developments to name a few, and we recognise that in such instances not all parties will be able to get exactly what they want.

So the Land Planning and Management is about achieving the fairest outcome possible considering those competing interests, and that’s why the state has robust laws to govern land management and planning.

So explorers confine their activities to areas that are prospective for minerals, that is in areas where the geology suggests the presence of minerals, as Ross explained before, that is all through the Stavely Zone, the Bendigo Zone which is where the Wombat State Forest applies, and parts of the northern part of the Melbourne Zone, so we do recognise that there is some competing land users there.

I think that – is that the last of the questions or is there another one?

I think that is the last question.

It is now 8:11 and I know that some of you have entered questions online.

I think most of them have actually been addressed either through the presentation that Ross has made, or the presentation that Laura has made.

As I promised at the beginning of this presentation we will provide written responses to all of the questions that we addressed tonight, but all of the questions that were put online.

I think it’s only fair that we do make a close now.

I would like to thank everyone for participating tonight.

The high level of participation just points to how interested people are in this subject, and just, I guess, closing remarks are that the department is there, there are contacts on our Earth Resources website for you to ask more questions, to reach out and say I still don’t understand or I’d like this addressed.

But also the obligation is on the exploration companies to provide you with information about their planned or actual proposed exploration programs.

We indicate to those companies they need a website and a feedback mechanism where members of the community can reach out to the exploration company and receive some answers, so please do use those opportunities.

And with that, once again I’d like to thank all of you for attending and participating, and I guess bid you all goodnight, and thank Ross and Laura particularly for their great presentations, and for Tony and Donna and John in the background and Jocelyn that have done an enormous amount of work to make this happen tonight.

So goodnight and speak to you soon hopefully.

Thank you.

*Ross Cayley*

Cheers folks.

*Laura Helm*

Thanks.

*Annie Farrow*

Thank you.