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Tom Doig

Dear Hazelwood Mine Fire Inquiry Board,

Please find attached a PDF file of my short book, *The Coal Face*, which was published by Penguin Books Australia in March 2015.

Parts 1 and 3 of *The Coal Face* address aspects of 'Health in the Latrobe Valley community relating to the 2014 Hazelwood Coal Mine Fire'. Specifically, Part 1 of *The Coal Face* addresses the adverse, and dramatic, short-term health effects caused by the Hazelwood fire and experienced by some residents. Part 3 of *The Coal Face* addresses the slowness and inadequacy of the Department of Health's response to these glaringly obvious health problems.

Part 2 of *The Coal Face* is relevant to 'Options to decrease the risk of fire arising from or impacting the Anglesea Mine'. Of particular concern is the close proximity of highly flammable eucalypt plantations directly upwind of Hazelwood Mine. Removing these trees is an obvious, achievable short-term solution that would reduce fire risk while the much longer and more complex problem of properly rehabilitating the coal mine is considered.

Please don't hesitate me with any questions you might have.

Regards,

Tom Doig

journalist, author, PhD candidate

www.tomdoig.com



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# **The Coal Face**

TOM DOIG



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To the people of Morwell and the Latrobe Valley, and especially to Voices of the Valley

Where we expected outrage, there were platitudes. Where we expected assistance, there were plastic buckets. Where we expected questions, there was silence, a frightening silence, broken only by the sound of emergency sirens.

TARA DEAN, Dying for a Laugh

Coal is good for humanity.

Tony Abbott

### PROLOGUE

In February of 2014, the open-cut coalmine next to Hazelwood Power Station caught fire. It burned out of control for forty-five days – over one thousand hours. The town of Morwell, home to 14000 people, is less than half a kilometre from Hazelwood mine. In the Latrobe Valley, over 100000 people live within 20 kilometres of the mine. Choking smoke and toxic gases filled the Valley. Carcinogenic brown coal ash fell as far away as Warragul, 50 kilometres to the west, and Sale, 60 kilometres to the east.

The short-term health effects included stinging eyes, sore throats, headaches, difficulty breathing, chest pains, rashes, nausea, 'metallic taste in mouth', bleeding gums, bleeding noses, diarrhoea, vomiting, and eleven probable deaths. The medium- and longterm health effects remain to be seen. The mine fire was 'a world's first in terms of prolonged adverse air quality', according to the Environment Protection Authority Victoria. Environment Victoria described the smoke as 'possibly the worst incident of environmental pollution in our state's history'. The mine fire was one of the worst industrial disasters Victoria has ever seen. It may also prove to be one of the worst public health disasters the state has ever seen.

The fire was foreseeable.

The disaster was preventable.

ONE The Fire

### A MASSIVE CLOUD OF SMOKE

On the morning of Sunday 9 February 2014, Simon Ellis sat out on the front verandah of his Morwell house with his younger brother Robert and his seven-year-old daughter Charity. The Ellises drank glass after glass of Coca-Cola and weathered the 40-degree heat and 50-kilometres-an-hour northwesterlies as best they could. Simon's house was near the top of Buckley's Hill and faced south, with views over the pink and green rooftops of Morwell. On the left, a pair of short, bushy trees on Comans Street framed the Hazelwood Power Station.

It was a brutally hot day and the sky was a vivid, cloudless blue. The days before, on Friday and Saturday, Simon had been working as a chef an hour away in Clayton. His brother called on Saturday morning and told him to get home: there was a fire in nearby Hernes Oak, and people in Morwell were 'just up and leaving'. But by the time Simon made it back that afternoon, there was no smoke to be seen. The Country Fire Authority (CFA) had the Hernes Oak fire under control, and the danger seemed to have passed.

While Simon and Robert sipped their drinks and tried to chill out, Charity went and played on the lawn with the kids next door. Suddenly Simon saw a puff of smoke on the horizon, a massive cloud coming out of the trees to the left of Hernes Oak near Driffield: 'It was as if someone had lit up a giant cigarette.' Since it was a total fire ban day, he called 000 straightaway. It was 1.03 p.m.

'There's a fire just started,' Simon told the operator in his Birmingham accent. 'I've seen it happen just now in the hills on the other side of the Strzelecki Highway.'

He was transferred to the CFA. When the CFA lady told him they already knew about the Hernes Oak fire, Simon replied, 'This is not the same fire – this is a fire that's just started, and I'm watching it *right now*.'

In the space of that short phone call, the column of whitish smoke had become a thick grey plume and was towering into the sky. To Simon, it looked like the beginnings of a mushroom cloud. The wind had changed to a ripping south-westerly, and Simon and his brother watched as the smoke moved steadily left, towards Hazelwood Power Station. After a few minutes the smoke got thicker and darker, and then it seemed to be coming from everywhere, swirling around until it blanketed the entire town. That's when they knew the fire had got into the mine.

As the afternoon wore on, Simon's neighbours crowded onto his little verandah. They listened to the radio and watched the TV news, trying to work out what was going on. The ABC reported that the Hernes Oak fire, which the CFA thought was contained, had flared up and spread along the Princes Freeway towards the mine from the west, before the wind change pushed the flames just past the northwest edge of Morwell and into the timber plantations to the north of town. But Simon and his neighbours couldn't see any of that - the smoke was too thick. As they sat there with their drinks, the mood was strangely festive; they were scared, but also excited. Simon took photograph after photograph as smoke billowed from one of Australia's most profitable holes in the ground into the ash-grey sky. The sun looked like an orange moon. The smoke had a weird smell and taste to it.

At 8.16 p.m. that evening, Trevor Rowe, spokesperson for GDF Suez, was interviewed by Scott Bevan on ABC News 24. GDF Suez is the owner of Hazelwood mine and one of the largest energy companies in the world. They refused to be interviewed for this book.

'Earlier this afternoon the fires did spread into [the] northern batters of the Hazelwood mine,' Rowe confirmed. 'Fortunately, it's an old workedout area of the mine and it's some distance from our normal coal-mining operation[s] so they haven't been affected.'

Bevan asked Rowe: 'If a fire were to get into a mine, into coal seams, I guess, for a layman like me, what's the threat? What's the long-term, or, indeed, the medium-term issue with that?'

'Look, our experience in years gone by, Scott, is that they are very difficult fires to manage,' Rowe replied. 'But, as I said, this area is well away from our operating area so we don't have that concern.'

The 'northern batters' is mining slang for the coalface on the northern edge of the Hazelwood mine. This steep, terraced bank is 3 kilometres long and 130 metres high: as tall as the Sydney Harbour Bridge, and over three times as wide.

Simon thought that Trevor Rowe was trying to give listeners the impression that because Hazelwood was still supplying electricity to the grid, there was nothing to worry about. Once the interview had finished, he called the ABC.

'You've just finished speaking to some guy from the mine?' he said. 'I'm sorry, but he's talking a load of *shit*.'

The ABC asked Simon if they could put him on air.

'Go for your life!' he said. And then, when he was on: 'Some guy called Trevor Rowe has just come on the radio and said there's no problem – but I can tell you that I'm looking at the mine *now*, and the mine is *burning*.'

Bevan asked him if he was sure.

'As sure as I'm standing here. I can see both edges of the mine, and I can clearly see fire coming from the *middle* of it.'

An hour later, the explosions started. At first everyone thought it was the briquette factory next to Hazelwood Power Station, but thanks to the infrared setting on Simon's video camera, he worked out it happened directly in front of the power plant – inside the mine. He managed to film the second and third blasts. He called the ABC again, and they put him straight to air.

'My name is Simon Ellis, I'm from Morwell in the Latrobe Valley, Gippsland. We've just witnessed three enormous explosions, over by Hazelwood Power Station . . . And now we're seeing what are probably 50-foot high flames, right now. All we can see is fire – I mean, it's going so fast, it's probably moved now, easy a couple hundred metres since I've been speaking to you . . .'

When asked about the explosions, he said, 'One minute you could see the haze of the orange of the low-lying fire – and then the entire sky just lit up.'

From Simon's verandah, everyone peered between the two trees on Comans Street to Hazelwood Power Station, which was illuminated by the flames. Another explosion. In the blinding flash, all Simon could see was the silhouette of two little trees.

### NOBODY CAME

The afternoon the fire broke out, Michelle Gatt closed up her cafe, So Swish, and hurried back to her home on Ann Street in southern Morwell, less than a kilometre from the mine. From the windows of her second-floor living room, Michelle and her daughter Islynde watched in astonishment as a pillar of smoke rose up 'like Hiroshima' a few kilometres to the south, while another larger fire bore down on the town from the west, turning the whole sky grey. Michelle's husband Marc was outside, frantically trying to hose down their house and garage in case the embers came.

At 3.30 p.m., Michelle noticed that the eight people who lived in a cul-de-sac of residential care units at the end of Maryvale Crescent were walking, or in a couple of cases riding in their motorised wheelchairs, down Ann Street. They were elderly or physically disabled or mentally ill with off-site carers who visited them once a day, and they had all just received the same automated phone call: it was a recorded voice message, telling them to evacuate. But they had no one to help them evacuate, and nowhere to evacuate to, so they just wandered up Maryvale Crescent onto Ann Street.

Michelle got them all to shelter in her garage. She handed out cups of tea and glasses of water, doing her best to take care of everyone, especially the very old, who were the most distressed. She took a couple of residents back to their units so they could get their address books and try to call someone to take care of them, but nobody came: no carers, no family, no ambulances, no taxis. The emergency services were busy with the fire in the mine; the roads were blocked but no one had been told; no one could get through.

By 5.30 p.m. the fire had reached the end of Maryvale Crescent and set the local German Club alight. Michelle and her family were told by police they had to evacuate. They closed up their garage and reluctantly left their elderly and infirm neighbours to fend for themselves.

When the Gatts were allowed home four hours later, it was dark. The residents of Maryvale Crescent were still shuffling helplessly back and forth along Ann Street through the ash that was raining down in the hot, thick night.

### 'IT WAS JUST A COMBUSTIBLE MESS!'

Retired Air Force photographer Doug Steley spent that Sunday on reserve duty at the Heyfield CFA fire station, an hour north-east of Morwell, watching Harry Potter DVDs and waiting for a call. There was only one fire tanker left at Heyfield; all their other trucks were already at Hernes Oak, doing what they could. On the most extreme fire-risk weekend since Black Saturday in 2009, the Heyfield tanker was one of just three trucks protecting a 600-square-kilometre triangle of parched grassy farmland stretching from Heyfield down to Traralgon in the west and Sale in the east. Doug's crew had the CFA radio on all day. They heard radio reports of the Hernes Oak fire burning down the corridor of trees lining the Princes Freeway as if it was an enormous ready-made fuse, leading straight to a densely packed plantation of tinder-dry eucalypts next to Hazelwood mine, which 'went off like a bomb'. They heard how, at the same time, the Driffield fire came out of nowhere and closed in on the mine. They heard the CFA strike teams lose the Hernes Oak fire again as it jumped across the Morwell River and started blowing embers into the open-cut. The general sentiment in the fire station was: *holy shit*.

At 7 p.m. Doug went home for dinner with his wife Margo, but he couldn't get his mind off the CFA crews down the mine.

Just then Ken Walker, one of the CFA fireys from Cowwarr, called up.

'We're looking for volunteers for the night shift,' Ken said.

'I'm in,' Doug replied.

It was dark when Doug and Ken drove in Ken's car into Traralgon. They joined up with a local CFA crew from Flynn and took charge of a couple of fire trucks before heading to the mine. Doug had never been inside Hazelwood before. The mine is so deep and wide that the whole of Melbourne's extended CBD, including Docklands and Southbank, could fit inside it, and only the tops of the very tallest buildings would stick up above ground level. As they drove closer, Doug could see the column of smoke rising in the glow of the flames.

They arrived at the main entrance to the Hazelwood Power Station, where the security guards spent the next ten minutes making confused phone calls and not letting them in. What the hell's going on, Doug thought. Don't they know the mine's on fire? Finally they were allowed to make their way to the assembly area. Apart from the thin, ragged lines of orange flames in the distance, it was pitch-black. Everything was covered in smoke.

The assembly point – a car park next to some buildings - was like a CFA Gippsland reunion: lots of fireys wandering around and catching up, but it didn't seem like much firefighting was going on. There were hardly any lights, because most of the power was gone. The power lines, it turned out, had been attached to wooden power poles dug into beds of brown coal, but not fitted with protective sprinkler systems. The poles on the northern batters had burned down earlier that afternoon, taking out the power and the backup power. Then some major transformers had shorted out, causing the dramatic explosions Simon Ellis had seen from his verandah. It meant GDF Suez couldn't use their electric water pumps. It meant CFA crews trying to fight the worsening mine fire had to use the water they arrived with.

It meant that in large sections of the mine, there was no water.

After taking in the chaos, Doug's crew walked into the makeshift control centre for their briefing. The building was dark, except where someone had set up a single work light outside that shone back in through the windows, like the set of a demented shadow puppet show. Three Hazelwood employees were running around inside the building 'like chooks with their heads cut off'. The fire control staff didn't have any maps of the mine. Instead, they drew 'mud maps' (rough sketches) on pieces of A3 paper, attempting to explain the convoluted layout of the 1000-hectare pit, with its 18-kilometre perimeter of now-flaming walls, to volunteer firefighters who'd never been inside a coalmine before.

Doug was on edge, ready to 'put wet stuff on red stuff'. Instead he had no choice but to wait while GDF Suez tried to find the crew an escort who could lead them through the mine. This took two hours. Doug wanted a coffee, but there was no power to heat the water.

While he was killing time, Doug got his camera out and took some photos. One hundred metres away, the top of the eastern batters looked like an erupting volcano spewing flames, smoke and ash into the air. Across the man-made gorge of the open-cut mine, a solid section of the northern batters glowed an angry orange, hundreds and hundreds of metres of solid flame. Just past the northern batters, Doug could see the amber lights of Morwell glowing softly.

The crew was eventually dispatched to an industrial estate bordering the eastern edge of the mine, where more wooden power poles had come down in the fires and were still burning. When Doug's crew made it to the downed power lines, a boundary fence blocked their way. They backtracked through a paddock, then down the non-GDF Suez side of the fence, beside a little road called Miners Way. The ground was freshly burnt and completely black. Instead of a decent firebreak zone cleared of undergrowth, Doug saw shells of burnt-out cars among long grass, weeds, blackberries and who knows what else growing there. 'It was just a combustible mess!'

The fireys spent the next couple of hours on 'blacking out' duty, hosing down still-smouldering logs and branches to make sure no embers would reignite when the wind changed. At 2 a.m. they drove back to the assembly point and sat around for another couple of hours. By this point GDF Suez had got a little backup power going, so they could at least have a coffee. As he waited for further instructions, Doug went to the meal room and got chatting to some Hazelwood employees who were coming on shift. 'The feeling of anger and frustration in the meal room was palpable. There was not a happy face among them.'

'The mine workers were complaining that [the] fire should never have happened . . . that it was an accident waiting to happen,' Doug said in his witness statement at the Hazelwood Mine Fire Inquiry held in the months following. 'Several mine workers said that if the Mine [operators] hadn't pulled out millions of dollars worth of suppression sprinklers, then they would not have had this problem. Others said that the company had promised to cover the bank in clay but because [the mine] was closing down, it was too expensive and [they] left it. Other mine workers said there was no clearing of firebreaks.'

Doug kept asking, 'Where is your backup emergency power? In your counter-disaster plan, the first thing you assume is that you're going to lose power. It doesn't matter if it's a storm, a fire, an earthquake or a flood – *you're going to lose power*!'

Just on dawn, Doug's crew followed a GDF Suez escort to the third-to-top level of the northern batters, relieving a CFA crew who had worked there all night. Doug and Ken went to observe the fire. It took Doug a little while to comprehend what he was looking at. There were vast banks of red glowing earth, and curtains of blue-grey smoke. The air felt as hot as a just-opened oven. 'Imagine as far as you can see, the ground itself is burning. The trees are still there, but the earth *underneath* the trees is burning.'

On the banks nearest to them, the blaze had been stopped, partially by a patch of functioning sprinklers, and partially by a water pipe that had sprung a leak, forming a waterfall down the terraces. To the left of the waterfall, the coalfaces were covered with grass and trees, and they were not on fire. To the right of the waterfall, the coalfaces were exposed, and they were burning.

'It's not going anywhere,' Ken said, 'and we're not going to be able to put it out.'

'It's a bloody waste of time!' Doug shot back. He had been on high alert for thirty-six hours.

The fireys didn't know where the nearest hydrant was, and even if they did, they were no match for that blaze. They also didn't know how long it would be until another CFA team turned up to relieve them. There was no functioning radio communication. After a futile half-hour they packed it in and headed back on their own, getting lost a couple of times on the way. When they made it to the control centre, Doug's crew told the fire control staff they were going home. They were asked to wait. Thirty minutes later, someone told them, 'There are some clean water pumps down the very bottom of the mine, we want you to go and defend them.'

By now it was early morning and there was no wind. Carbon monoxide is invisible, odourless, heavier than air, and deadly in high concentrations: during fires, it collects at the bottom of valleys. Someone gave Doug's crew carbon monoxide monitors, but no one knew what the readings meant. Their only instruction was from a mine employee who said, 'If it goes off in a long continuous "beep", get out of there.'

There was no escort to take them to the bottom of the mine, and no clear directions how to get there, but they found their way down, eventually. From the bottom of the cut, the walls of coal towered 130 metres overhead. Smoke poured out of the hillside from a million tiny holes. Every few seconds, Doug's carbon monoxide monitor let out a little high-pitched 'beep'.

The crew were meant to protect the clean water pump station, which was a 20 metre by 20 metre tangle of generators and rusted half-metre-wide pipes and walkways. This was the only pump supplying water to the entire mine – tens of thousands of litres of water every minute, piped to all the water sprays and hydrants around Hazelwood – but the pump itself was defenceless. It wasn't fitted with any kind of sprinkler system. There wasn't even a hydrant for firefighters to plug into. Just 25 metres away from the pump station, a fire burned inside the coalface.

'When you're standing there, it fills the horizon. It's all you can see. You can feel the heat against your face, you can see the cracks in the earth opening up and the glowing red embers inside. *Holy bloody hell*, *the whole hill is on fire.*'

Doug's team had one tanker full of water.

'What's 3500 litres gonna do against a burning hill of coal?' Doug asked. Ken shrugged.

'We're just tourists with a front seat view.'

It was 'pure good luck' that the clean water pump station survived that morning. If the fire had spread, Doug and his crew would have cleared out as quickly as possible to save themselves. The pump would have burned and failed. After that, 'there would've been no water supply. The fire would've taken out the whole mine.'

By the time Doug and Ken were relieved of duty at 10 a.m., they had been working, or trying to work, for over twelve hours. As Ken drove Doug back to Heyfield, they had the radio on, loud, to keep them awake. GDF Suez Asset Manager George Graham, the most senior manager at Hazelwood Power Station and Mine, was talking to the ABC.

'We expect the fire to be out in two weeks' time,' Graham said.

Ken glanced at Doug.

'He obviously hasn't seen the fire.'

'Or he has no concept of what's going on.'

Doug looked out the back window at the smoke engulfing Morwell.

'What a clusterfuck.'

### 'THIS SMOKE'S A BIT FUNNY . . .'

Late on Sunday night Tracie Lund, the coordinator of Morwell Neighbourhood House and Learning Centre, a local not-for-profit organisation, called her colleague Melinda Smith.

'You're still alive and you've got feet – so come to work tomorrow,' she told Melinda.

Tracie already knew that a lot of people had been affected by the fires, but even with the information she'd been able to glean from her firefighter husband Simon's CFA radio, even with hours spent on Facebook, she still wasn't sure which areas had copped it worst. So when she drove in to work from Traralgon on Monday morning she thought, Let's start with what we've got, touch base with the people we know. Tracie and Melinda closed the Neighbourhood House to the public and started ringing through their database: about 300 phone numbers, all across Morwell.

Immediately Tracie had people saying to her: 'Yes, we're safe, thanks for ringing. This smoke's a bit funny . . .'

At first Tracie wasn't too concerned, because there was still a lot of bushfire smoke around. But at the same time, it did strike her as strange: a lot of those people had lived near power stations and coalmines their whole lives, so they should've been used to smoke.

Tracie opened the Neighbourhood House back up on Tuesday. It was still really smoky outside, but some people came in for their computer skills classes anyway.

'My throat's really sore,' one person said.

'This is different,' remarked another.

'It's weird smoke.'

'There's something going on . . .'

You've lived here for forty years and you're saying this is different, Tracie found herself thinking. Hmm . . . By now Tracie and Melinda were taking active notes. If they knew where someone lived, they'd write: *Resident on McMillan Street reports headache*. *Resident on Wallace Street is reporting sore throat*. By the end of that first week, Tracie had spoken to close to a hundred different people on the phone or in person, and she was getting the same answers: sore throats. Difficulty breathing. Stinging, irritated eyes. Headaches. Tracie herself had what she called a 'thick head' – not a headache exactly, but a weird heaviness in her brain. It would come over her as she drove in to work in the morning and leave at night when she drove back to Traralgon.

Tracie and Melinda plotted all their information on a map: complaints from Berry Street and Avondale Road in the south, complaints from Airlie Bank Road and Beattie Crescent in the north. It felt like the whole of Morwell was complaining. Tracie didn't know what was going on, but she knew something was up.

In the second week Tracie and Melinda did another round of phone calls. This time they started getting reports of bleeding noses and asthma. People with pre-existing asthma problems were having to implement their asthma plans, but other people were saying, 'I just went to the doctor, and they've given me a Ventolin inhaler? I've never had asthma before, but now I can't breathe . . .'

Within a week, the situation had gone from being 'a little bit irritating' to the point where 'the com-

munity was completely distressed'.

'On Thursday 20 February 2014,' Tracie wrote in her submission to the Hazelwood Mine Fire Inquiry, 'I typed up all the health concerns reported by the residents. It was clear that the problem was across the town. I sent this information to the Latrobe City Council and the CFA engagement team at the Hazelwood mine fire by email. It was my understanding they were feeding the information I provided to the Department of Health.'

Tracie did not hear from the Department of Health.

# 'DON'T YOU KNOW WHAT'S GOING ON HERE?'

Two days into the fire, on Tuesday II February, Latrobe Valley native Naomi Farmer was at La Trobe uni in Melbourne's north-east. Naomi's dad Brett called up for a chat, as he often did when work at Hazelwood mine was slow. (Brett Farmer was not willing to be interviewed for this book.) They were having a nice conversation until Naomi said something offhand about the weather. Brett got really upset at her. 'Don't you know what's going on here?' he said angrily.

Naomi didn't know what was going on. She'd been in the Latrobe Valley the week before, out at Federation University in Churchill, going through the archives of the Gippsland Trades and Labor Council to prepare a talk on the history of the union movement at the Hazelwood Power Station. When the Hernes Oak fire started on Friday, Naomi had trouble driving back from Churchill to her parents' house in Newborough because the Princes Freeway was closed off. But when she drove home on Saturday night the freeway was open again and everything seemed fine. The Hazelwood mine fire hadn't been reported in the Melbourne media much at all.

After chatting to her dad, Naomi started paying a bit more attention. She quickly realised, through Facebook mainly, how bad the air pollution was. A friend of hers who lives in Moe made a joke: 'Today we saw the sun! It was amazing!'

So Naomi pitched a story to the editor of *Red Flag* and on Thursday she caught the train down to Moe. Naomi's dad wasn't working at the mine that day, so he picked her up from the station. Brett drove Naomi to see her mum, Wendy, who was working in Traralgon.

'When are they going to put the fire out?' Naomi

asked Wendy. Wendy rolled her eyes.

'They said it would take a fortnight, but who knows...'

Naomi had arranged an interview with union boss Luke van der Meulen, who has the elaborate title of Victorian President of the Mining and Energy Division of the Construction Forestry Mining and Energy Union (CFMEU). The CFMEU office is on top of a hill overlooking the Hazelwood mine. On the day the mine fire broke out, flames came up the hill as far as the car park, which acted as a firebreak and was the only thing stopping the building from catching fire. As Brett went up Hazelwood Drive, he turned right onto Miners Way, so Naomi could take some photos of the smoke. The gate at the end of Miners Way leads towards the eastern batters of the mine, which were on fire. It was usually open, but now it was closed and manned by six security guards. Brett pulled over and Naomi was startled by the 'incredible billow of grey smog' pouring out of the mine. It was worse than she could've imagined: her eves started stinging the moment she stepped out of the car. The air felt 'thick' and it burned her throat. A security guard came over straight away.

'You're not allowed to take photos,' he said. 'The police told us that if anyone around here is taking photos, then give the police their rego and they will take care of it.'

'This is a public road,' Naomi retorted. The guard wrote down Brett's licence plate number. Naomi took a couple more photos then Brett drove them away, up Lignite Court to the CFMEU building. Inside the office, the receptionist told Naomi that Luke van der Meulen wasn't at work because his wife had had a severe asthma attack and needed to go to hospital. After chatting to the receptionist for a while, Naomi and Brett went back outside. The wind had changed and the smoke was worse, making Naomi cough and wheeze. Two police cars had parked behind Brett's Toyota, blocking it in, and a couple of cops were looking into the windows of his car. A third police car was parked further up the road, next to three security guards' cars. Brett was furious.

'What's going on? What the fuck are you doing with my car? I haven't done anything wrong!'

Brett and Naomi got into the car. The police reversed out of the way so they could leave. Brett drove down Lignite Court, followed by all six police and security vehicles. He turned right onto Hazelwood Drive; the escort followed him past Miners Way. They didn't stop tailing Brett's car until he took the turnoff onto the Princes Freeway and drove out of Morwell.

### 'MAYBE IT'S THE HEAT OR SOMETHING'

The smallest animals died first. Julie Brown and her husband Matt had eighteen chickens in their Morwell backyard, just north of the train tracks. In the first month of smoke, ten of the chooks died. They were almost fully grown, past the age where they might die of birth defects. One died here, one died there, and at first Julie and Matt thought, Well, maybe it's the heat or something. But then three more chickens died, then five more.

Julie doesn't cope well with 'dead things', so Matt took care of the bodies. In their garden, all the plants were covered with ash, the pumpkin leaves turned dark grey and fake-looking. Because the chicken pen was full of hay, Julie didn't notice the ash as much – until they went to clean it out. When Matt and Julie turned the hay over, the ash flew everywhere, getting in their eyes and mouths. It was thick on the ground and mixed into the dirt. Julie was shocked.

'I'm getting out of here,' she told Matt. 'You can do the whole thing yourself.'

Matt grunted and got on with it, coughing and swearing the whole time.

Julie is convinced those ten chickens died because of the fires. The coal ash was dropping in their water; they pecked it up with their feed; and all the time the birds were breathing in that dodgy air. Julie now wishes she had paid to have the chooks autopsied, so she'd know for sure. But 'it was just some chooks' after all, and at the time she didn't know anything about the risks posed by brown coal smoke and ash. Besides, she had her own headaches and sore throat to deal with, plus her husband had developed sinus and ear infections that took several courses of antibiotics and steroids to clear, and her six-year-old son's asthma was getting so bad that he would cough until he vomited.

### A THICK GLUEY GOO

After the fires started, and the drama with her neighbours sheltering in her garage, it took Michelle Gatt two full days before she noticed that something was up with her two-year-old German shorthaired pointer, Chooch. On Monday night at dinnertime, instead of bounding around the corner like usual, Chooch was moving really slowly. What's wrong? Michelle wondered – then she saw the blood on the concrete. All four of Chooch's paws had 'opened up'. In the days that followed, the dog started to bleed from every cavity in her body and her hair fell out in thick clumps. Her teats became distended, red and ulcerated, and she swelled up from her usual slim size until she was 'like an elephant'.

When Michelle took Chooch to the vet, the vet's diagnosis was that the dog must have been 'doused with petrol and set alight'. Even though Michelle wasn't convinced, she went home and checked the perimeter of their property, just in case someone had tipped something over the fence, but no. So she took Chooch to another vet for a second opinion. The next vet said that the dog had been 'chemically burned'.

Chooch had a build-up of ash in her fur, and every night at dusk, as it became dewy, the moisture turned the ash into a caustic alkaline paste. It was sticky, 'like superglue', and really hard to remove. The coal ash paste caused irritations all over Chooch's body, and when she tried to lick it off, she swallowed it. This made her intestines swell up until she started bleeding internally.

The vet told Michelle that unless Chooch was taken to Hallam Park Animal Hospital, a specialist vet near Dandenong, and put on a drip under 24-hour care, she would die. Michelle did this for a week, which cost \$6500. Chooch improved to a degree, but she became vicious and angry, and wouldn't let anyone touch her. The vet did a number of tests, which showed that the dog had chemicals in her system that she couldn't have ingested in an ordinary backyard. These included traces of the chemical retardant that was being sprayed on the Hazelwood fire, a few hundred metres away from Michelle's house.

Back home, whenever it rained, Michelle noticed that there was a fine residue in the ash on the pavement – a bit like pollen, except instead of being yellow, it was bright pink. At the same time, the coalash paste that nearly killed Chooch had also stuck to their tiles, and was eating through the canopy in the back garden. It was in their trees too, and when it rained a thick gluey goo would drip slowly from the branches onto the lawn.

### A FREE RIDE

For the first two weeks of the fires, every Monday, Wednesday and Friday morning nineteen-year-old Colleen Robinson walked a kilometre from her parents' house in Newborough over to John Field Drive, where she waited on the side of the road for the Route 8 bus to take her to hospital.

Even before the fires, Colleen was in a bad way.

She had been diagnosed with acute kidney failure in late January after months of worsening tiredness, nausea, vomiting and 'whatnot'. One of her kidneys had lost 96 per cent function, the pathology people said, and her other kidney wasn't working at all. She had her first haemodialysis treatment at Latrobe Regional Hospital in Traralgon on Friday 7 February. By the time the machine had taken out her blood, cleaned it and put it back in again, Hernes Oak was on fire.

And so, every second morning for half a month, Colleen and her mum Heather or her dad Bruce caught the bus down John Field Drive and along the Princes Freeway through the avenue of blackened trees. The bus turned off the freeway and meandered through downtown Morwell, stopping and opening its doors to let on passengers and particulate matter, carbon monoxide, nitrogen dioxide, sulphur dioxide, ozone, dangerous levels of aluminium, barium, chromium, iron, strontium and titanium, and traces of various other heavy metals, solvents, carcinogens and mutagens.

'The smoke was pretty bad, it smelt pretty bad. My lungs would feel full of smoke, unclean air – I reckon it affected me a bit. Once I was on the haemo, it cleaned up my blood and took out the smoke, so I felt a little better by the end of the treatment. But then I had to travel back through it.'

The Department of Health's advice was to stay inside, but Colleen and her parents had no choice – and no car (it broke down in January). Meanwhile, Colleen's dad Bruce had health issues of his own: pre-existing heart and respiratory problems, which wouldn't have been helped by the commute. Bruce asked the Department of Health for advice and for assistance with relocating. He was given a number to call, but it never picked up. Even though Bruce was on the sickness pension and Heather was a stay-at-home mum, because the Robinsons didn't live in south Morwell in the very worst of the smoke, they weren't eligible for the relocation assistance package. Newborough was too far away.

After the fires started, Bruce 'ended up on new medication'. He died in June, three days after his fifty-fifth birthday. Births, Deaths and Marriages data would show a spike in deaths in the Moe– Newborough region for that period.

As the fire burned on and the ill wind blew, Colleen received only the most basic support.

'When I caught the bus through Morwell, it was a free ride.'

# TWO

# First Causes

### EXPERIENCE THE ENERGY!

On the edge of Morwell, at the bottom of Ridge Road, a rusted, lichen-stained sign promises: 'Tours inside working brown coalmines and operating power stations . . . no need to book, just continue up the hill to where an electrifying experience awaits you!' At the top of the road there is a large, empty car park with panoramic views of the Latrobe Valley. Hazelwood Power Station's eight cigarette-shaped smokestacks form a miniature skyline against the horizon. To the right of the chimneys, there is a view into the Hazelwood open-cut mine: a vast striped terrace of steep black banks and light-grey roadways that looks half natural, half artificial, a cross between an amphitheatre and a canyon.

Next to the Ridge Road car park, there is a row of five information boards, put there by the PowerWorks Energy Education Centre to teach schoolchildren and tourists about the coal industry:

### COOL COAL

Our story of thermal power generation from brown coal starts around 50 million years ago in the hot and humid forests that covered the floor of the Latrobe Valley. Huge trees grew in this flat, swampy land. Leaves, seeds, grasses and branches fell into the swamp and began to decay. When the plants died they sank into the swamp.

Over time these layers of plant material have formed into layers of *brown coal*. Another name for brown coal is *lignite*.

Latrobe Valley brown coal is world famous. Here the seams of coal are 60 to 170 metres thick, and total up to 770 metres deep. The large area of coal is 68 kilometres long and 8 to 16 kilometres wide. It is one of the largest single deposits of brown coal in the world!

There is no reference to the Gunaikurnai people, who settled in the area more than 800 generations ago, and lived there for a time so long that it qualifies, in Western terms, as 'forever'. The sign also doesn't mention that the Gunaikurnai word for 'swamp' is *moe*, or that *morwell* means 'inhabitants of the swamp'. The top half of the information board has been spray-painted over with a spiky turquoise tag saying something like 'BANGLEH'. All of the boards are covered with this turquoise graffiti. It makes them hard to read, but some factoids still stand out:

> Realistically, renewable energy fuel sources will play a limited role in replacing coal-fired baseload electricity generation because of their unreliability; for example: it's not always windy.

> Did you know? The quality of our air in the Latrobe Valley is generally far superior to that of Melbourne?

Imagine what our life would be like without electricity!

The front door of the PowerWorks office is closed. A piece of laminated A<sub>3</sub> paper has been gaffer-taped to the door: 'PowerWorks Energy Education Centre has ceased operations permanently, effective Friday December 21st 2012. Mine and power station tours will no longer be conducted.' Back at the bottom of Ridge Road, a massive, ancient bucket-wheel excavator looms overhead, skeletal and robotic and dinosaur-like. The ten storey-high, 725-tonne rusted hulk of machinery was used in the 1950s to dig out the beginnings of the Hazelwood open-cut. The sign next to the dredger could do with a bit of updating:

### HAZELWOOD MINE

To protect the mine and facilities against fires, water is distributed to the various coal levels through a network of pipes to rotating sprays which can be seen operating predominantly during the summer period on days of high fire danger. The sprays are also operated to suppress airborne coal dust on days of strong winds.

The part of the sign that says 'water is distributed to the various coal levels through a network of pipes to rotating sprays' was accurate until around 1994, but then things started to change. To explain exactly how GDF Suez was 'protect[ing] the mine and facilities against fires' in 2014, the sign would have to be much, much larger – and the story would have to start seventy years ago.

## A BRIEF HISTORY OF THE HAZELWOOD OPEN-CUT MINE

In 1945, Morwell was little more than a whistlestop on the Gippsland railway line two hours east of Melbourne, with a population of just under 3000. That November, the State Electricity Commission of Victoria (SECV) announced its plans to build a brand new open-cut coalmine approximately 400 metres south of Morwell's Wallace Street, the southern edge of town. This new mine would be almost as large as the Yallourn open-cut mine 3 kilometres north-east of Morwell, which had been created in the 1920s and had caught fire the year before when embers from a bushfire blew onto the exposed coalfaces. Six people in Morwell died in the disaster.

The good news about the new mine: there would be jobs for all. The bad news: in fifty years time, all the residents of Morwell would have to relocate to the as-yet-unbuilt town of 'New Morwell', so old Morwell could be dug up. Morwell, it turned out, was sitting on top of some of the richest deposits of brown coal in the Latrobe Valley.

The citizens of Morwell thought that New Morwell was a terrible idea, and made their feelings known. The premier of Victoria, John Cain Senior, took up their cause, and through a combination of community protest and political pressure, Morwell was saved. But in all the commotion to preserve the town, no one demanded that the SECV scrap its plans for a new coalmine, or even revise them. (Industry best practice, as established at the Yallourn mine back in 1921, recommended a minimum 'buffer zone' of 1.6 kilometres between coalmines and houses.) Instead, the Victorian premier got to rescue Morwell, while the SECV got to dig its gigantic new open-cut mine right next door.

'It's a sheer disgrace, to be honest,' said David Langmore, regional planning expert and author of *Planning Power: The Uses and Abuses of Power in the Planning of the Latrobe Valley*. 'They should have either removed the town or, if the town remained, the amenity of that town should have been protected properly. It is very clear, particularly after [the 2014 mine fire], that a 400-metre separation zone is absurdly inadequate.'

## A NETWORK OF ROTATING WATER SPRAYS, PART I

The Hazelwood Power Station opened on 24 November 1964. The engineers who built it intended

for it to be shut down by 2005. That never happened, and Hazelwood has since been described by the World Wildlife Fund as 'the most polluting of all power stations operating in the world's major industrialised countries'. It also was, and is, central to Victoria's economy. Hazelwood supplies up to one quarter of the state's electricity needs, as well as producing 15 per cent of Victoria's emissions: 16 million tonnes of greenhouse gases per year.

As business boomed throughout the Latrobe Valley in the 1960s, houses continued popping up along Wallace Street. Two smaller streets, Hiam Court and Billingsley Court, branched off it, and in total about 100 extra houses were added to the southern edge of Morwell. Coal dust from the mine was a nuisance, but on windy days the SECV turned on its network of rotating water sprays - like garden sprinklers except much larger and more powerful - and they dampened down the coalface, minimising the problem. Smoke from spot fires in the mine was also a recurring, but minor, inconvenience. Coal being coal, it is liable to burst into flames at the slightest provocation. On extremely hot days brown coal can even spontaneously combust. An average of 300 spot fires started inside the mine every year, but the SECV's extensive sprays and many maintenance staff could almost always get them under control

within a few hours.

There were exceptions, of course. In November 1977 a major fire broke out at the western end of the northern batters. The blaze was caused by sparks from a hot exhaust pipe igniting coal dust, and the fire took hold because water sprays and fire service pipelines had been temporarily removed from the area. The 1977 Hazelwood fire lasted for three days. At the time this was considered to be a fire of unusually long duration. After the fire was extinguished, a review committee recommended increasing the amount of water pipes and rotating sprays on the coalface as the best way to prevent future fires.

### MINE REHABILITATION

The SECV completed their excavation of the northern batters in the 1980s. They couldn't cut any further without needing to remove Wallace Street, then Hiam Court and Billingsley Court, then downtown Morwell. Instead, the gigantic dredgers lumbered over to the south and west of the mine and kept digging.

When a coalface's status changes from 'operational' to 'worked-out', the next step, in theory, is for the coalface to be 'rehabilitated'. According to Dr Nicholas Aberle, Environment Victoria's Safe Climate Campaign Manager, 'the most simple definition of rehabilitation is "to repair the damage caused by mining activity", but obviously there are different schools of thought about what counts as "repairing". Successful rehabilitation should be in large part driven by the community – what they want the future of the land to be.'

An interim form of mine rehabilitation, known as 'progressive rehabilitation', involves making the batters safe from fires: covering disused coalfaces with clay, or some other fireproof substance, as soon as possible after the coalface becomes 'worked-out', to prevent that coal from burning in the future. The ultimate goal of mine rehabilitation – repairing broken landscapes - takes much longer. First, the tops of the steep mine walls need to be rounded off into flatter slopes, which then have to be landscaped until they look vaguely 'natural'. Next, the exposed coal has to be covered over with clay and then topsoil, ideally the same type of soil that was present before the mine was dug. Then trees, shrubs or grasses must be planted and cultivated for years, until finally the fully 'rehabilitated' land is ready to be used by humans and/or animals, as farmland or nature reserves or parks.

Reshaping a 130-metre cliff back into a gently rolling paddock is not easy. The simplest way to do it would be to shave away at the steep coalfaces until they become flatter, longer and eventually near to horizontal. This would require a few hundred metres of unoccupied buffer zone to dig back into. In the case of Hazelwood's northern batters, the houses on Wallace Street make this impossible. A second option would to be to truck in millions of cubic metres of dirt from offsite and dump it against the coalface until the cliff is totally filled in. This would be both time-consuming and extremely expensive. The SECV never considered doing such a thing. Their ultimate rehabilitation plan, which was formulated without any community consultation and never developed in detail, was to wait until all mining in Hazelwood was finished and then flood the mine, turning it into a lake. Such a 'plan' didn't include any progressive rehabilitation of worked-out coalfaces with clay or soil, possibly because one day they would be covered with water.

Between 1980 and 1996 the SECV rehabilitated 270 hectares of disused land, although this work didn't include any steep coalfaces, such as the northern batters. This meant that for fire prevention the mine operators were totally reliant on the extensive maze of water pipes and oversized sprinkler heads that snaked across and up and down the fifty-storey terraced cliff face of brown coal, just 400 metres from Morwell.

# THE PRINCES FREEWAY DIVERSION, PART I

In the early 1990s, the state Labor government of John Cain Junior - son of John Cain Senior, 'saviour' of Morwell - decided to shave valuable minutes off Gippsland travel times by building a freeway diversion around Morwell. The new freeway ran through the buffer zone between Wallace Street and the Hazelwood mine. A freeway is essentially a thick slab of concrete, and when it was dug into the earth it behaved like a partial dam, interfering with the flow of groundwater and causing pressure to start building up in the soil directly under the concrete. Long-time Wallace Street resident John Stratford described this as 'the sophisticated hydrological principle of putting your thumb over the end of a hose'. An independent assessment by consulting engineer Peter Yttrup found that 'the construction of the Princes Freeway did not adequately provide for surface drainage nor make any allowance for shallow ground water drainage'. People walking along Wallace Street after a rainy night can see the backed-up water forcing its way upwards out of the drains and up through the numerous cracks in the pavement before trickling into the gutter.

This increased groundwater pressure has the potential to destabilise the ground all the way from Wallace Street to the coalfaces of the northern batters, causing land movement and landslips as well as stretching, twisting and ultimately rupturing the water pipes installed across the cliffs. Yttrup describes this as 'a serious oversight in the freeway design'.

## A NETWORK OF ROTATING WATER SPRAYS, PART 2

By the early 1990s the sprinkler systems on the northern coalface of Hazelwood mine were ageing badly. The SECV had not installed any new pipes since 1980, and the oldest pipes dated from 1955. None of the pipework had been replaced. Brown coal is often acidic and on the northern batters this corroded the steel pipes, causing them to leak. The leaking pipes flooded the surrounding ground, making it unstable. The occasional landslip occurred, putting even more stress on the pipes, and making future leaks more likely.

Fixing the broken steel pipes with welding equipment was also difficult and dangerous. The welders' blowtorches would often set the coalface on fire, in areas where the water sprays had stopped working, because the pipes were leaking. In extreme cases, these 'leaks' could become the size of waterfalls – like the waterfall that firefighter Doug Steley witnessed cascading down the northern batters.

One solution to this problem would have been to replace the old degraded pipework with new pipes. Instead, in 1994 the SECV revised the Mine Fire Service Policy and Code of Practice. 'Fixed spray breaks,' they decided, 'were no longer a minimum fire protection requirement so long as [fire hydrants] were provided within five minutes travel of any part of the worked-out areas' of the mine. This new policy was the opposite of advice provided two years earlier by consulting firm Richard Oliver International Pty Ltd, in an independent risk assessment report that the SECV had paid for. The report pointed out that 'from November 1989 to April 1992, there were twenty-eight fires reported in the worked-out areas [of the mine]. Piped water was the major means of fire suppression.' The consultants recommended that, although the current water supply to disused areas of Hazelwood mine was 'adequate', it 'could be a little greater (perhaps 20 per cent more) than policy requirement for the worked-out areas and batters'. Instead, the SECV dispensed with the policy requirement. At the same time, the SECV decided that covering exposed coal with clay was 'no longer a minimum fire protection requirement' for workedout coalfaces. This marked a shift away from fire *prevention* (trying to make sure blazes didn't start in the first place) towards fire *suppression* (dealing with flare-ups if and when they occurred).

In 1996, the new owners of the Hazelwood mine found themselves under no legal obligation to fix or replace damaged water pipes on the northern coalfaces – they could just remove them. Which, from 1996 to 2007, is precisely what they did. The Hazelwood Mine Fire Inquiry Report notes that when GDF Suez Carbon Efficiency and Improvement General Manager Richard Polmear was asked why these pipes were removed but not replaced, his answer was, 'They didn't need to be.' Mr Polmear was referring to the terms of the 1994 Mine Fire Service Policy and Code of Practice, and he was technically correct.

As old water pipes kept leaking and being removed, and as the sprinklers attached to those pipes were removed in the process, the responsibility for keeping the northern batters safe from fire fell on mine staff, particularly the twenty-person Hazelwood Mine Fire Service. The Mine Fire Service depot was located on top of the northern batters, where they had a commanding view of most of the mine. One of their jobs was to detect spot fires, then drive a fire tanker to the flames and put it out with their hoses. However, if their tanker ran out of water before the fire was extinguished – a fire tanker typically holds a couple of minutes of water if hoses are going full bore - the Mine Fire Service crew would have to leave the fire and drive to the nearest hydrant and refill before returning. The length of any round-trip would depend on a number of factors: the condition of the access roads; pre-existing knowledge of those roads; the location of the nearest fire hydrant; knowledge of the hydrant's location; and, finally, the presence of high-pressure water in the fire hydrants. If any one of those elements became a problem, it could make it difficult or impossible for firefighters to do their job, as Doug Steley experienced firsthand.

#### PRIVATISATION

From the beginning of the 1960s until the end of the 1980s, the State Electricity Commission of Victoria was one of the biggest employers in the Latrobe Valley. For the workers, the 'SEC' stood for 'Slow, Easy and Comfortable'. Sleeping on the job was accepted behaviour on the night shift, because many employees were there purely in case something went wrong – if it didn't, there was nothing for them to do. In the late 1980s the state Labor government began the process of privatising the SECV's assets, and in 1992 the SECV announced that Hazelwood Power Station would be 'retired' in 2005. Then in 1996 the Kennett Liberal government sold the Hazelwood mine and power station to British energy giant International Power for \$2.35 billion. As part of the sale, International Power acquired the right to operate Hazelwood until 2036.

Then in August 2010 GDF Suez, the largest utility company in the world, took over International Power. GDF Suez is a French multinational corporation that made \$125 billion in profit in 2013. GDF Suez has over 130000 employees in seventy countries; in 2014, just 500 of them worked at Hazelwood.

In March 2014, an Italian judge ordered police to seize and close down the Vado Ligure coal power station in Italy's north. The judge ruled that toxic emissions from the Vado Ligure power station, which is 50 per cent owned by GDF Suez, had caused 442 premature deaths between 2000 and 2007. 'We do not understand the rationale for this decision,' GDF Suez responded, before calling the health study linking emissions and deaths 'biased'.

With privatisation in the 1980s and 1990s there were massive job losses within the Latrobe Valley power industry, including at Hazelwood power station and mine. The commonly agreed–upon figure is at least 5000 direct job losses: over onethird of the total population of Morwell at the time. Following these redundancies, tens of thousands more jobs disappeared across the Latrobe Valley as ex-mine workers no longer had wages to spend within the local economy. Former Loy Yang Power Station employee Cliff Thornton sums up the privatisation process like this: 'They murdered Morwell and Moe – Traralgon's kicked on, but they murdered Morwell and Moe.'

At the Hazelwood mine, many of the jobs that disappeared were defined, broadly, as 'maintenance'. In an open-cut coalmine, much maintenance work – such as the clearing of vegetation from access roads and from disused coalfaces – doubles as fire prevention work. More generally, the struc-
tural 'overemployment' of the 'Slow, Easy and Comfortable' era meant that there were always large numbers of workers on call in the event of an emergency; for example, during the 1977 mine fire. After privatisation, this was no longer the case. Somewhere along the line – no one seems to be able to say quite when - the Hazelwood Mine Fire Service's depot was relocated away from the northern batters. Although very few people realised it at the time, from the mid-1990s onwards the residents of Morwell had a 400 000-square-metre coalface, not covered by fire-retardant clay and increasingly unprotected by machine or human, just over their back fence. After the 2014 Hazelwood mine fire, the CFMEU's Luke van der Meulen declared, 'It's right to say that privatisation is responsible for the extent of that fire.'

#### TIMBER PLANTATIONS

In the late 1990s and early 2000s, Australian Paper Plantations Pty Ltd and Gippsland Water set up three timber plantations less than 2 kilometres from the western edge of the Hazelwood mine. The timber of choice was native Australian eucalyptus: in Gippsland Water's case, Tasmanian Blue Gums. They are some of the fastest-growing and most flammable trees in the world. Regional planning expert David Langmore has described them as 'potential incendiary bombs'.

The prevailing wind in Morwell is a westerly; the eucalypts were planted upwind of the coalmine. Southern Australia has always been one of the most bushfire-prone places in the world. In recent decades, the effects of accelerating climate change have caused the risk of bushfire in the Latrobe Valley to increase dramatically as summers become hotter and drier and more unpredictable. On Black Saturday in 2009, a number of fires burned through the Latrobe Valley, including a fire in the Callignee and Hazelwood townships that killed eleven people. The fire began in a pine plantation 1 kilometre from Churchill and almost spread into the Loy Yang open-cut mine, 5 kilometres from Traralgon.

Each year the densely packed trees next to Hazelwood mine grew taller, and each summer they came to pose a greater threat: the larger the trees, the larger the potential flames, and the more likely they would be to send burning embers sailing downwind into the coalmine. Bushfire risk consultant Roderic Incoll called this situation a 'significant planning failure'. He also said that, as far as GDF Suez is concerned, the proximity of the timber plantations to the hundreds of hectares of exposed brown coal in the mine 'amounts to a foreseeable risk'.

#### THE MORWELL RIVER DIVERSION

In 2005, the Hazelwood mine operators sought planning approval to divert a 10-kilometre stretch of the Morwell River 500 metres west of its existing course. This would allow them to expand the Hazelwood mine massively, digging up a further 43 million tonnes of coal from its western flanks. The new boundary of the open-cut would be even closer to the fast-growing eucalypt plantations than before, placing the mine at greater risk of ember attacks.

Planning approval was granted.

# THE 2005 AND 2008 HAZELWOOD MINE FIRES

On 30 December 2005, a fire broke out in the disused south-eastern batters of the mine after strong winds caused an old, smouldering underground 'hot spot' to flare up. The fire took hold on a 30-metre high coalface in the middle of the 100-metre-high batter with poor road access. It took five days of firefighting before the blaze was declared safe. An internal report by the mine operators advised that 'further consideration should be given to ease of access, location and reliability of water supply in other worked-out sections of the mine, specifically the north-eastern batters of the mine'. This 'further consideration' did not produce any tangible results.

A little under three years later, on 14 September 2008, the same hot spot flared up again. This time the fire burned out of control for four days. Consulting firm GHD were hired to investigate the mine fire. GHD concluded that the most 'significant factor in this fire' quickly becoming 'uncontrollable' was the fact that mine personnel were 'unable to mount an effective initial response as the non-operational areas [of the mine] have very difficult access and there were insufficient firefighting facilities available'. A draft version of GHD's report was more specific: 'a critical element of the initial response . . . was the lack of fire water supply to the non-operational areas [of the mine,] and the restrictions in access due to the conditions of the roads, the accumulation of debris and [the fact] that some batters did not have road access.' The report recommended that 'a risk assessment should be undertaken on the non-operational areas [of the mine] to determine if further work is required.'

As GDF Suez Senior Mine Planner Romeo Prezioso admitted to the Hazelwood Mine Fire Inquiry, this risk assessment never happened.

# THE PRINCES FREEWAY DIVERSION, PART 2

In February 2011, numerous 2-centimetre-wide cracks appeared along a 50-metre section of the Princes Freeway, just across from John Stratford's house on Wallace Street. Cracks were found from the freeway all the way down the northern batters of Hazelwood mine, the biggest 'crack' being a 15-metre-wide sinkhole that opened up at the top of the coalface. The sinkhole was caused by rainwater leaking out of the Morwell Main Drain, which runs parallel to the Princes Freeway, into the coal beds beneath. According to the then-Department of Primary Industries (DPI), 'it was apparent that water entering the mine batters was the cause of the mine batter instability and that there was a likelihood the mine batter would collapse.' The freeway was closed for eight months for repairs, which cost \$10 million dollars.

To prevent expensive and potentially fatal slips from happening in the future, something had to be done to reduce the groundwater pressure. DPI decided to drill fifty horizontal drain holes deep into the coalface, each one roughly 20 centimetres in diameter and 500 metres deep. Some of the bore holes went directly under the Princes Freeway. While this has allowed excess groundwater to flow out of the northern batters in a more orderly, less destructive fashion, in the event of a fire breaking out on the cliff those fifty drain holes would effectively aerate the coalface. Environmental Auditor Rob Savory has argued that 'clearly neither the consultant who prepared this Work Plan nor the regulators who signed off on it had any concept of [the] fact that the recommended horizontal bores drilled into the coal batters would considerably exacerbate the spread of a mine fire,' by allowing the flames to burn quickly deep underground where they would be almost impossible to put out. In other words, there was now a risk the drain holes would function like a network of flues in a gigantic stove made entirely out of brown coal.

The northern batters were now increasingly unstable, increasingly flammable and increasingly difficult to rehabilitate. Between 2008 and 2012, GDF Suez did complete some capping and revegetation work on the eastern end of the northern batters. (In 2014, these sections didn't catch fire.) For the remaining 3 kilometres of coalface, the dilapidated network of corroded, leaking water pipes and sprays was the only fire prevention method available. Even so, GDF Suez continued to remove lengths of 6- and 10-inch diameter steel water pipes from the northern batters. According to an anonymous GDF Suez employee, 'The rumour I heard is that they sold them for scrap.'

#### THE SLOT BUNKER

Apart from the northern batters, most of the rest of Hazelwood mine was encircled by an extensive ring of water pipes and sprinklers – but the sprinklers couldn't all be operated at the same time. There wasn't enough water pressure. In an emergency, the mine operators would have to decide where the water flowed and where it didn't. When questioned by the Hazelwood Mine Fire Inquiry about this, GDF Suez Asset Manager George Graham confirmed that the company's number one priority was protecting 'the slot bunker' – the central point in the mine where freshly dug coal is collected then delivered into the power station to produce electricity. When asked if GDF Suez had 'adequately recognised' the risks of a fire breaking out in a worked-out area of the mine, such as the northern batters, Graham admitted that such a fire was not regarded by GDF Suez as a potential 'major mining hazard'. (A 'major mining hazard' is defined as 'an incident that causes, or poses a significant risk of causing, more than one death'.) Graham added that GDF Suez's focus was 'not even [on protecting] the operating faces of the mine' from fire – it was all about defending the slot bunker. 'The reason being,' Graham said, 'a fire there will put us out of business.'

Emergency Management Commissioner Craig Lapsley said that the problem with GDF Suez's risk assessment was that it focused on 'risk mitigation' – reducing the likelihood of a disaster happening – but didn't adequately consider the 'consequences' of disasters, should they occur.

'The weakness in [GDF Suez's] risk and mitigation strategy was that it was about the power generation, and not necessarily about how close the mine was to a community – and, if you had an ongoing fire, what that would do to that community. That's the missing bit.'

Lapsley agreed that this 'massive blind spot' regarding the actual consequences of disasters was

shared by the emergency services.

Doug Steley had a similar, if less sympathetic, view of GDF Suez's priorities. Doug witnessed first-hand how GDF Suez 'put all their water and firefighting [resources], everything that they had, into protecting the working area of the mine. That was perfectly defended, you know? They had pulled [water and firefighting resources] out of the rest of the mine to protect production, because they're making so much money every day, they can't afford for that to go down. As far as they were concerned, if the rest of the mine went up in smoke, well – bad luck, somebody else could deal with that.'

The mine operators, it turned out, were only interested in protecting the assets that were making them money. In this, at least, GDF Suez was successful. At the very beginning of the disaster, Hazelwood Power Station lost 90 per cent of its electricity production for a 24-hour period. For the next forty-four days, it was business as usual.

#### FORESEEING THE FORESEEABLE

The Victorian summer of 2013–14 was one of the hottest ever. There were extended record-

breaking heatwaves and hardly any rain. In the lead-up to the Hazelwood mine fire, then–Fire Services Commissioner Craig Lapsley warned that the weekend of 8–9 February 2014 would bring the most extreme fire-risk conditions the state had experienced since Black Saturday. For Lapsley to declare a 'code red' (catastrophic) fire danger warning in the Latrobe Valley the forest fire danger index would have had to be 101 or above; the danger index for that weekend was 97. Lapsley issued a number of warnings to the community, and announced a total fire ban for 8 and 9 February.

All this information, taken in total, is what the Hazelwood Mine Fire Inquiry Report meant when it said the mine fire was 'foreseeable'.

Unfortunately, no one within GDF Suez managed to foresee it. In the GDF Suez offices, all but one of the key employees who were trained to act as Emergency Commanders in the event of a fire decided to leave the Latrobe Valley that weekend to escape the heat. Mine Shift Supervisor Ian Wilkinson, who was rostered on, went to work. Technical Services Manager James Faithfull went to the beachside town of Inverloch. Mine Production Manager Rob Dugan drove four hours east to Mallacoota. GDF Suez's Mine Director, Garry Wilkinson, was on holiday somewhere in Queensland.

#### 'AN ACCIDENT WAITING TO HAPPEN'

It could have been any fire, but it was a grass fire that broke out in Hernes Oak on the afternoon of Friday 7 February 2014, 10 kilometres north-west of Hazelwood mine. The blaze was small to begin with and the CFA responded quickly, declaring it 'under control' by Friday night. But on Sunday afternoon the wind changed to a strong westerly and the smouldering fire exploded, breaking its containment lines and burning down the tree-lined corridor of the Princes Freeway until it reached the eucalypt plantations by the Morwell River, I kilometre from the mine. The eucalypts responded to the bushfire in an entirely predictable manner: they burst into flames, and the wind blew millions of embers and burning strips of bark directly onto Hazelwood's vast cliffs of exposed brown coal. The Board of Inquiry considered this to be the likely cause of the mine fire.

The Board also accepted that the mine fire may have had other causes, namely a second fire that started on Sunday afternoon 10 kilometres southwest of Hazelwood mine, in Driffield, just as the Hernes Oak fire was flaring up again. The Driffield fire burned across dry grass and through trees towards the mine, also sending flaming embers into the open-cut. There were also allegations, serious ones, from the CFMEU's Luke van der Meulen, that there was already a fire burning inside Hazelwood mine well before Sunday afternoon.

'The trouble is – and I reported this to the Mine Fire Inquiry – a number of our members told us that they were experiencing fires in the Morwell mine, well before the supposed fire jumped into the mine [on Sunday],' said van der Meulen. 'But none of them will come forward. If you come forward on something like this you will probably lose your job.'

The Inquiry Report declared that 'there is no evidence to suggest that the Hazelwood mine fire started from a source inside the mine'. Van der Meulen's statement, which is not a direct eyewitness account, does not count as evidence.

An even more hair-raising suggestion comes from inside the Melbourne Fire Brigade (MFB). According to an MFB firefighter who spoke on condition of anonymity, 'the worst possible rumour' is that GDF Suez had to use an angle grinder on a total fire ban day to break a lock to get water flowing into their water pipes, in preparation to fight the approaching bushfires. Sparks from an angle grinder allegedly set fire to the brown coal around the pipe. 'In restarting their ring main,' the firefighter suggested, 'they in fact started the fire.' The Hernes Oak fire is thought to have been started by an out-of-control campfire. The Driffield fire is suspected to be the work of an arsonist. The fire that allegedly started in the Hazelwood mine before Sunday 9 February 2014 is unconfirmed. How these respective fires started might be interesting, but it is ultimately not that important. During fire season in the Latrobe Valley, fires are to be expected, and brown coal is extremely flammable. The central question is: how much work had the mine owners done to prevent a small fire from becoming a forty-five day chronic industrial disaster? After Environmental Auditor Rob Savory completed a 'detailed assessment of available documentation', he concluded: 'the catastrophic mine fire of January 2014 was inevitable, "an accident waiting for a time to happen".'

# THREE

# Fallout and Fightback

### 'WHAT HAPPENS AT HAZELWOOD STAYS AT HAZELWOOD'

Naomi Farmer finished her *Red Flag* article on Sunday 23 February, two weeks into the fire. It was published on their website that afternoon with the title 'Disaster in the Valley'. The story included a description of Naomi's dad Brett working in the mine on a dredger, not realising he had 'elevated and dangerous levels of carbon monoxide in his blood':

> 'I was digging coal from way over the other side of the open-cut and I thought, "There is no drama here, the wind is blowing pretty strong." I only went outside for half an hour to check the oil levels and then the next thing you know, I am going to hospital,' he said.

According to Naomi, Brett had his blood tested on the spur of the moment, and somewhat randomly, 'just because he was near a testing station'. The carbon monoxide levels in his bloodstream were so high that the medic insisted Brett be taken to Latrobe Regional Hospital in Traralgon immediately. He wasn't even allowed to go to his locker to take off his work boots.

Naomi's 'Disaster in the Valley' article went viral on Facebook. It was one of the first in-depth reports on the mine fire, and people in the Latrobe Valley were starved for stories that reflected the seriousness of the situation. Doug Steley posted the story's URL on the comments sections of every news site he could find, with notes saying: 'Why aren't you reporting this?'

That evening, from her share house in Thornbury, Naomi decided to 'call a protest' in Morwell for the next weekend. She set up a Facebook event and started inviting people, as well as friending anyone who commented on the event page or shared her article. After receiving 40 000 hits within a few hours, *Red Flag*'s servers overloaded and the site crashed. But by then the wheels were in motion. Dozens of Latrobe Valley locals friended Naomi on Facebook and sent her messages of support and tales of woe. Some of these new 'friends' worked at GDF Suez, and had information about conditions in the mine.

'Just to fill you in – I can only post so much, as told will lose [my] job,' one worker wrote to Naomi the day after her article appeared. 'We are contractors that drive tilt trays and low loaders on a daily basis. We have to drive to the bottom of the open-cut [mine] for Coates Hire/Hazelwood Power etc. We are unprotected. Told to use back gate as our [carbon dioxide] readings are too high. Medical teams [at the front gate] will not let us leave. We have felt so light-headed, throwing up etc. etc., then we drive on road in heavy vehicles, putting other road users at risk [...] If I don't do this I will lose my job.

'As of today we have to hand phones in to Hazelwood Power security, if phone has camera. No photos to be taken on site. Think we need 60 *Minutes, Today Tonight*, etc. [...] don't believe reports from [Craig] Lapsley or any government department, they tell lies. They don't want the town to panic.'

The next day, the contractor got in touch again.

'Just got home from Hazelwood. Ended up in medical. [Carbon dioxide] readings were over the top. Ambos wanted to take me hospital. Officers in charge wouldn't let me leave. Three heart attacks here today. "What happens at Hazelwood stays at Hazelwood," they are telling us. They are paying us off with Bunnings gift vouchers and hats to keep what is happening in Hazelwood "under our hat" lol. I'm over it.'

Soon after this, the worker stopped messaging her.

#### 'RELATIVELY NON-TOXIC'

Latrobe Valley resident Tara Dean became suspicious within a fortnight of the fire breaking out. The Department of Health published media releases and information sheets, but they didn't always make sense.

> Q: Could this current smoke exposure affect my long-term health or that of my family?A: If you were exposed to high air levels of smoke, breathing difficulties may develop or recur in the following 36 hours. Seek immediate medical help if symptoms occur.

Tara was taken aback – was thirty-six hours meant to qualify as 'long-term', or had the Department of Health just failed to answer its own question?

In interviews and press conferences, Chief Health Officer and government spokesperson Rosemary Lester talked about a 'knowledge gap' regarding what was in the smoke and ash and what it would do to people. (Dr Lester refused to be interviewed for this book.) Tara wasn't convinced, so she just googled 'coal smoke'. The first thing that came up was the 'Great Smog' of London in 1952, which lasted for five days, made 100000 people sick and caused 12000 premature deaths. It was the result of excessive quantities of coal smoke and ash in the air and in people's homes. London doctors tried to blame the sickness and death on an influenza epidemic, but this was subsequently disproved.

The more research Tara and her partner Ron Ipsen did from Ron's Tanjil South lounge, the worse it got. Tara and Ron immediately became concerned about the high levels of PM2.5 particles in the smoke. They found out that when coal is burned, the combustion is not complete. Some extremely small particulate matter (or 'PM') remains intact, and is carried into the air with the smoke and ash. These are called PM2.5 particles because they are smaller than 2.5 microns in diameter. (There are 10000 microns in a centimetre; a few thousand PM2.5 particles could easily fit within a single 10-point font full stop.) When breathed in, these microscopic particles are taken deep into the lungs, which are unable to filter them. They pass directly into the bloodstream, and can cause brain aneurysms and heart attacks in the short term. The long-term health effects of PM2.5 exposure, according to the Department of the Environment's website, could be drastic:

Studies have linked exposure to particle pollution to a number of health problems including respiratory illnesses (such as asthma and bronchitis) and cardiovascular disease. In addition, the chemical components of some particles, particularly combustion products, have been shown to cause cancer. These effects are often more pronounced for vulnerable groups, such as the very young and the elderly.

High levels of PM2.5 pollution is one of the main reasons Beijing's air is so notoriously hazy and dangerous to breathe. On bad days in Morwell, the air was worse than in Beijing. The World Health Organization considers a daily average of 25 parts per million to be the maximum safe level of PM2.5 exposure. In the course of the 45-day mine fire, this safe level was exceeded in the south of Morwell on twenty-one days. PM2.5 levels were 'hazardous' – higher than 150 parts per million – on seven different days. The highest recorded reading, on 15–16 February 2014, was 700 parts per million, nearly thirty times worse than the maximum recommended exposure.

On 27 February, Ron and Tara found an online media release by Professor Adrian Barnett, a leading health statistician and pollution expert at QUT: Coal smoke is very dangerous to health; we know this from some of the earliest epidemiological studies in this field on the London coal smoke smog of 1952. [There was] around a 10 per cent increase in mortality during the London smog episode, applied to a large city population. So the more people who are exposed in Morwell, the greater the overall health problem will be . . . Staying indoors or wearing masks does not offer complete protection from some of the smoke particles, which can be tiny and easily penetrate inside homes. If I lived in the area I would move my family away until the fire was out.

Then there was the question of the ash. A 2010 report by US activist group Physicians for Social Responsibility, *Coal Ash: The Toxic Threat to Our Health and Environment*, made for dire reading:

Typically, coal ash contains arsenic, lead, mercury, cadmium, *chromium* and selenium, as well as *aluminium*, antimony, *barium*, beryllium, boron, chlorine, cobalt, manganese, molybdenum, nickel, thallium, vanadium, and zinc. All can be toxic. [The italicised metals above were present in EPA samples of the Hazelwood ash in greater amounts than the 'minimum risk levels for acute/ intermediate exposure'.] Especially where there is prolonged exposure, these toxic metals can cause several types of cancer, heart damage, lung disease, respiratory distress, kidney disease, reproductive problems, gastrointestinal illness, birth defects, impaired bone growth in children, nervous system impacts, cognitive deficits, developmental delays and behavioural problems. In short, coal ash toxics have the potential to injure all of the major organ systems, damage physical health and development, and even contribute to mortality.

Meanwhile, the Department of Health's website was offering Latrobe Valley residents the following reassuring information:

#### COAL ASH AND YOUR HEALTH

The ash deposited by the Latrobe Valley coalmines is relatively non-toxic and is similar to ash that might be found in your fireplace.

Ash particles have the potential to act as mild skin, eyes, nose or throat irritants and are

too large to be breathed deeply into the lungs. Ash on household surfaces is unlikely to cause short- or long-term health effects.

Was Hazelwood coal ash somehow different from all other coal ash? To Tara, these contradictions seemed bizarre, and dubious. Phrases like 'relatively non-toxic' sounded like classic Doublespeak, straight out of 1984. It was Orwellian - or rather. it was 'Morwellian'. The absurdity of the situation inspired Tara to start writing a play script, which she called *Dying for a Laugh*. The play was a coping mechanism for Tara, as she and Ron were both experiencing plenty of short-term health effects. 'Ron would go out to get a wheelbarrow load of wood, and he'd come back pasty-white, sweat dripping off him and absolutely exhausted, and he'd have to sleep. His lungs were like a waterfall, just rumbling away - you could hear the fluid in his lungs when he was sleeping.' The smoke and ash affected Tara's cognitive functioning straightaway: she felt disoriented, scattered. And nauseated. Then she started having kidney trouble, followed by a sinus infection that wouldn't go away and eventually ruptured her eardrum.

On 28 February 2014, nineteen days into the fire, Dr Lester issued a 'community update', advising that 'temporary relocation away from the smoke is now recommended for people aged over sixty-five, preschool aged children, pregnant women and anyone with a pre-existing heart or lung condition living or working in Morwell South, south of the railway line in Commercial Road'. Ron and Tara lived 14 kilometres north-west of Commercial Road. They did not temporarily relocate.

#### PROTEST AT KERNOT HALL

On Sunday 2 March 2014, Morwell had its first mass community protest in living memory. Hordes of suffering locals took to the streets with hand-painted banners and scribbled-on t-shirts and non-symbolic face masks, asserting their right to breathe clean air.

Before the mine fire, fifty-year-old Wendy Farmer was one of the least political people around. She knew the name of the prime minister, but only because she had to for Rotary Youth Exchange. Otherwise she 'didn't give a damn'. She would often go to the polling booth thinking, Well, which one am I going to vote for this time?

Wendy thought that the Melbourne activists who travelled to the Latrobe Valley to protest against Hazelwood Power Station were just 'pain-in-the-butt nuisances. They're greenies! They're ferals! Troublemakers. Unemployed bums who've got nothing better to do... they just want to cause trouble.'

Wendy had a socialist activist for an oldest daughter, but that wasn't her fault. She and Brett had 'lost' Naomi years ago to a politics degree in Melbourne, then a second time to the student unions. 'Why are you doing this?' Wendy would ask Naomi. 'Why don't you get a job and pay your own bills?'

By late February, though, Wendy had become 'really pissed off' with the government, particularly Rosemary Lester and Coalition Health Minister David Davis, 'who both kept saying the smoke was harmless'. Brett was sick in bed for a second week with something like the flu – except the doctor said it wasn't flu. So when Naomi told Wendy she wanted to organise a protest, Wendy said, 'You can do it – I'll help.'

As it happened, plenty of people were keen to help. Simon Ellis, who had watched the explosions from his verandah, got involved at the outset, as did Julie Brown, whose chickens had died. Someone would say, 'I'll help,' and all of a sudden they were part of the organising committee. (All of a sudden there *was* an organising committee; a couple of weeks later, they would decide to call themselves 'Voices of the Valley'.) Wendy taped posters to poles and bins and whatever else she could find. She left leaflets in cafes and shops and encouraged people to hand them out themselves. The plan was to meet outside Morwell's Kernot Hall, listen to some speeches, then have a good, old-fashioned angry march through town.

The morning of the protest, Wendy got out a faded red t-shirt and wrote 'we need HELP' in thick black block letters across the front, and 'STOP the lies' across the back. There was still a bit of space on the front of the shirt, so she wrote 'Disaster In The Valley' in smaller letters across the shoulders. Wendy had hoped the rally would be big, 200 or maybe 300 people. On the day, more than 1500 people turned up. Miners and greenies and housewives and bikers all crowded together, some carrying homemade signs:

No matter HOW? or WHEN? this fire started, we need more help! NOW!!

Stop ARSON about

Bandaids and Bullshit will NOT fix smoke

Please explain this is getting out of FLAMING control

When 'We' Can't Breathe Nothing!!!! Else Matters: It's Toxic Smoke!!!

One guy had a t-shirt that read: 'Smoke in the Valley, COAL DUST IN THE SKY: Take the Blame! Tell the Truth!'

It was another smoky, hazy day, with PM2.5 levels at twice the safe daily maximum. The organising committee decided it was dangerous for people to be outside for too long, so everyone packed into Kernot Hall. Simon Ellis had printed off some one-page health surveys for people to record their symptoms. Three hundred and forty-one people filled them out.

Dr Richard Di Natale, Australian Greens Senator and a former GP, stood up in front of a capacity crowd to speak. 'The concern through this fire has been, initially, carbon monoxide,' he said, 'but my concern was always the issue of PM2.5 particles, which is the very fine dust that people breathe in as a result of fires like this.

'What we should have seen is an orderly evacuation of people who are most at risk. To say that there are no long-term health impacts is just wrong!'

The CFMEU's Luke van der Meulen was more

concerned with the fire itself. 'This was a fire that was totally preventable. This should not have happened . . . That mine needs to be totally rehabilitated and all those old coal workings need to be totally covered in, now!'

Wendy sat in the audience listening to Morwell teacher Erin Gruis talk about relocating to protect her three young children, about having to pay extra costs while not being able to work. It was outrageous. That morning, Naomi had been pestering her mum to speak at the meeting, but Wendy insisted, 'No, I'm not going to talk, I'm not going to talk.' She had spoken in front of small groups with Rotary, and no one was about to call her shy, but she wasn't exactly a seasoned public speaker. As she listened to Erin, though, Wendy thought, This is my cue, I should get up there. Gripping a computer printout of the Public Health and Wellbeing Act 2008, she looked out over the sea of angry faces, some still wearing their face masks, and got off to a shaky start.

'The Chief Health Officer, Dr Rosemary Lester, in this morning's Age, said: "There is not a lot of evidence that short-term exposure produces long-term effects" -'

'Lies!' someone yelled. The whole hall erupted in angry boos and jeers.

Wendy was shocked – did people think she was on Lester's side?

'Can I continue,' she said, raising her hand and her voice, 'because there's a point to this . . . *The Public Health and Wellbeing Act 2008*, Section Six, says, quote: "If a public health risk poses a serious threat, lack of full scientific certainty should not be used as a reason to postpone measures to prevent or control the public risk." We need help, now – for everybody!'

This time Kernot Hall burst into cheering and applause.

Wendy stood up straighter. 'This is the Latrobe Valley sticking together!' she shouted. 'We can act together. We can force the government to declare this a national disaster!'

She waved her pages in the air.

'The Health Act says so! *The Health Act says so*?' She stormed off stage.

The crowd went wild.

After all the speeches everyone went outside. Naomi had brought a megaphone and she encouraged people to say their piece. Afterwards she gave Wendy the megaphone to hold for a second. Wendy didn't give it back. She ended up at the front of the march, yelling, '*Disaster in the valley! We need help!*' with everyone joining in behind her. Wendy had discovered a hidden talent: rabble-rousing.

#### PROTEST AT SPRING STREET

Wendy and Naomi organised another rally for the following week, on Tuesday II March, at Spring Street in Melbourne. When Channel 9 found out about the event, the *Today* show called Wendy and asked if she'd do an interview on the morning of the protest. She agreed and found herself in a TV studio in Southbank, having her hair fixed by professionals and being dusted down with foundation, a few hours before she was due on the steps of Parliament. Wendy was terrified but the TV spot went smoothly. *Lights, camera, action*, cross to Karl Stefanovic asking questions from Sydney: too easy.

Afterwards, she said to Brett, 'Let's walk up to the GDF offices and say hi.'

Brett didn't want to get involved, in case he got in trouble at work. He waited up the road.

Wendy strode into the reception of Rialto Towers on Collins Street, explained who she was, and asked to speak to whoever was in charge. GDF Suez responded to her arrival, and her homemade 'Disaster In The Valley' t-shirt, by going into 'total lockdown'. 'They escorted me off their property out onto the pavement, and stood this huge security guard behind me. He just stood there with his arms crossed looking bored.'

Around midday, a few other people started arriving outside GDF Suez's Melbourne corporate offices, including Voices of the Valley's new president, Simon Ellis. After the colossal turnout at Kernot Hall, Wendy and Simon were hoping to take Melbourne by storm, but the combination of distance, work and family commitments, poverty, apathy and widespread illness meant that it was a much smaller group: around fifty people.

'Last night on the news they reported that 6000 people have evacuated from Morwell,' Wendy said into the loudhailer. 'About 500 have been given assistance by the government. The rest of them are forgotten. If you don't have a Health Care Card, you don't qualify for help.'

The protest marched up to Spring Street, where Simon gave a speech on the steps of Parliament.

'We have heard today that at 12.30, the Honourable – whether you can call him that – Denis Napthine is making a statement, for an inquiry [into the fire] . . . We want a *judicial* inquiry, we want it to be *independent*, and we want it to be done *now*.' Napthine's investigation would be called the Hazelwood Mine Fire Inquiry. It would be judicial, and independent, and it would be chaired by the Honourable Bernard Teague, who had headed the Royal Commission into the Black Saturday bushfires. The board would also include Professor of Public Health John Catford, and Sonia Petering, an experienced corporate lawyer.

After the speeches, the Morwellians were allowed into the Parliament's public gallery to listen to the politicians discuss their situation. In the Upper House, Health Minister David Davis and Shadow Health Minister Gavin Jennings were having a slanging match about the mine fire. Davis mentioned 'the support that was provided to the town' by the state government, and the protesters in the gallery exploded with incredulous coughs that drowned out Davis's words.

Gavin Jennings asked Davis what advice the government had received from Rosemary Lester about potentially evacuating Morwell.

'It is *scientific advice* that is weighed up by *government*,' Davis bellowed over the coughing.

'How scientific is it?' retorted one Labor pollie. 'What is it?' asked Jennings.

'It is *advice* that is provided to government *from time to time*, as appropriate, *depending* on the

circumstances.'

The Morwellians laughed scornfully and coughed louder.

'In the course of his answer, the minister did not share with us the advice that he had gained from the Chief Health Officer,' Jennings pointed out. The gallery booed. Wendy kept calling out 'Liar!' but the security guards couldn't tell who it was.

Davis's replies became increasingly shrill and outraged as he struggled to compete with the hacking cacophony from the gallery. A woman near the back stood up and let rip.

'You're talking about our *lives*! You're lying! You're *lying*! How can you sleep at night? Why don't you go up to Morwell and sleep there for twentyfour hours! We have to breathe that air *every day*! Thank you for your fresh Melbourne air for one day. *Thank you.*'

As the woman left, followed closely by Parliamentary security guards, the gallery erupted into violent applause. Then the coughing started up again.

#### NIGHT SWEATS

Tara and Ron became caught up with Voices of the Valley soon after those first protests, and the group's ambitions and workload 'just snowballed' after that. There was a group of eleven core people, a dozen more semi-involved members, and lots of chat on social media. Tara became mates with Julie Brown, and with Dee Nicholson, who lived one street over from Wendy. At one of the first Voices of the Valley meetings, Julie mentioned in passing that someone she knew had been to five funerals in the past week. The Latrobe Valley is home to some of the least healthy people in Victoria – along with the adjacent Shire of Wellington, which is downwind from the brown-coal power stations. Latrobe and Wellington have the highest rates of lung cancer and heart disease in Gippsland; this is often attributed to ambient air pollution from the region's brown coal power stations. Latrobe Valley residents die four years earlier than the state average, and workers at the asbestos-riddled Hazelwood Power Station die fifteen years earlier than the average. Even so, five funerals seemed a lot.

Once it had become 'really fucking obvious' to Ron that something was going on, he thought, I better put a questionnaire up on the internet, to document people's symptoms. Ron got ninety-one responses, from as far afield as Traralgon, Yinnar and Warragul. Some comments on the completed surveys included:

- Night sweats.
- Sore throat like swallowing razors.
- Vomiting, sore throat, eye infection, asthmalike breathing problem where I had to use puffer. I don't smoke but can't catch my breath.
- My chest felt like it had a brick [in it].
- Had a very strong dose of antibiotics to kill the infection.
- Living in toxic smoke.
- When I get a smell of it I am dry-retching.
- Been to the doctor twice and he said I'm fine.
- My kidneys hurt. Really dark urine. Hair loss, coughing up green lumps of stuff. Mood swings. Tiredness depression.
- Weakness in body.
- · Sores up nose.
- Severe headache, disorientation, very frightening, intense breathlessness not relieved by Ventolin inhaler. I'd been in Morwell less than four hours.
- Depression about the lack of response to the entire thing.
- A stinging feeling and then can't talk.

 $\cdot$  My dog and bird died.

In March, firefighters began to get the better of the burning banks of coal. By this time GDF Suez had had to install 8 kilometres of brand new water pipes on and near the northern batters, at a cost of \$2.5 million. On 25 March 2014, over 1000 hours after the mine fire began, then–Fire Services Commissioner Craig Lapsley declared the blaze 'under control'. The CFA and MFB firefighting bill was \$32.5 million; the total cost of the fire was reckoned to be well over \$100 million. The mine fire wasn't out; it was still smouldering, and on windy days it would still get hard to breathe in Morwell. And while the worst of the disaster was over, but the public health crisis wasn't.

# 'I HAD NO IDEA SO MANY PEOPLE WOULD CARE'

At Morwell Neighbourhood House, coordinator Tracie Lund had become increasingly active over the course of the fire. In mid-February, the CFA encouraged Tracie to start holding weekly community information sessions at the Neighbourhood House. These meetings ended up running until late March. The sessions were emotional and exhausting, as distressed locals struggled to get straight answers from officials, often with mixed results. At a meeting in late March, the only one attended by a Department of Health representative, Public Health Manager Tim Owen came along to take questions from members of the public. Owen's attendance drew a larger crowd than usual.

'Are my veges okay to eat?' one woman asked, worried about the build-up of ash.

'Yes, that's okay, wash them, they'll be okay,' Owen replied.

A few minutes later another resident asked about safety precautions while vacuuming and cleaning up. He had come in to Morwell Neighbourhood House a few days earlier to borrow a vacuum cleaner and Tracie had given him a face mask and pair of gloves, as per the Department of Health's recommendations.

'Why do I need [the face mask and gloves] if I've already been breathing this stuff in for days anyway?' he asked.

'You're stirring up the dust,' Owen said. 'You really need to make sure that you've covered your-self.'

The crowd was baffled.

'But you just said we could eat it.'

While the mine fire was still burning, activist group GetUp had contacted Tracie to see if she wanted to launch a petition calling for a full-scale public health investigation. Tracie decided to wait until after the Napthine Government announced the terms of reference of the Mine Fire Inquiry, which she hoped would address her concerns. On II March, the government sent out a media release:

> Broadly, the Terms of Reference will examine the regulatory regime which applied to the Hazelwood mine; the adequacy and effectiveness of the emergency response; how the fire started and spread into the mine; and the adequacy of information to and support of the affected communities.

Tracie was gobsmacked. 'All I was hearing about from the community was the health effects. The stuff that I was thinking would be a priority in the Inquiry just wasn't there. It seemed mind-boggling that they'd leave [the public health concerns] out.'

The final terms of reference, confirmed on 31 March 2014, would include an assessment of 'the adequacy and effectiveness of the response to the Hazelwood Coal Mine Fire . . . in particular, the

measures taken in respect of the health and wellbeing of the affected communities'.

At the time, however, Tracie 'did what had to be done'. She got in touch with GetUp, and they started drafting a petition together. They settled on a wordy title: 'Morwell Residents Deserve An Inquiry Into The Long-Term Health Impact Of The Hazelwood Mine Fire'. On 22 March, Morwell Neighbourhood House posted the petition on its Facebook page, and Tracie and Melinda got everyone they knew to share it. Then GetUp unleashed the power of its email list. 'After that it just went nuts. I was very unprepared, I had no idea so many people would care.' Tracie inadvertently became the face of a major online campaign, and had to contend with radio journalists calling her house at 7 a.m. while she was trying to get her kids ready for school.

Within a month, Tracie's petition had 25000 signatures, and over 1500 people had emailed Rosemary Lester's office demanding action. Tracie had struck a nerve. 'The feedback I was getting was, people were absolutely appalled that the government didn't want to do anything about the health impact. [The petition] gave that issue, that underlying rumble, a voice – people were able to speak to it.' On 27 April 2014, Lester announced that the government would undertake a ten-year health study on the residents of Morwell. There is a photograph of Tracie presenting Lester with a thick red manila folder full of signed petitions. Tracie looks ecstatic; Lester, awkward.

#### 'PLEASE CALL ME'

In mid-March, Bernard Teague had announced that public submissions to the Hazelwood Mine Fire Inquiry would be accepted until Monday 12 May 2014. Ron was determined to submit all of Voices of the Valley's health data to the Inquiry. But not everyone in the group agreed, and by the time Ron managed to get all the health surveys from Simon – who was suffering from severe asthma and resigned as Voices of the Valley President soon after – it was already Thursday 8 May.

Ron made an online spreadsheet, and 'Tara and Julie and Dee just worked flat-knacker on turning all the bits of paper into data. John and Mary Anne stuck their hands up too, and Wendy – but Tara, Julie and Dee were the team.'

It was 'a three-day nonstop marathon' of data entry and vicarious suffering. Tara, Julie and Dee worked around the clock from their respective homes, hardly sleeping, chatting on Facebook in between surveys. Reading the accounts reduced them to tears again and again; for Tara, it was 'really heavy-duty trauma'. She had a couple of 'particularly heartbreaking moments': 'There was a woman who had been really fit, never smoked, immaculate health – she could no longer walk up a hill. And then there was the beautiful copperplate handwriting of an old man, at the end of his story of not being able to breathe, that just said: "please call me".

'They were so trusting, [the people] filling in those forms. They believed that we could do something for them. It felt like a huge responsibility.'

Throughout all this, Ron remained totally 'jobfocused', treating the accumulating horror as content for his formulas that he needed to get 'graphed up' as soon as possible. As the figures came together into multicoloured bar graphs, 'sore throat', 'headaches' and 'nausea' towered above the other symptoms. Ron emailed the Inquiry at 4 p.m. on Monday 12 May, then collapsed on the couch.

#### 'THIS IS DYNAMITE - WHAT DO WE DO?'

A few days later, Tara walked into the kitchen. The

Moe RSL newsletter for April–June was on the table and she picked it up and started reading it, only half paying attention to the President's Report, at least at first:

> Well once again time has flown by us, at times I wish it would slow down a bit. We have lost more members this past three months than I would like, as the number of Veterans slowly fades away . . . We've also had more members in hospital than normal, I know that the age group doesn't help. To all who are poorly healthed at this time: I send you my wishes to get well quickly . . .

An ugly question popped into Tara's head: if the illness rates were above average, were the death rates going to be higher than normal too? The RSL news-letter reinforced all her fears, and threatened to turn the whole situation 'into something bloody horrific'.

At the next Voices of the Valley meeting, the group decided to make a request to the Victorian Registry of Births, Deaths and Marriages for all the death records for the Morwell postcode from February to June, as well as for the adjacent postcodes of Traralgon, Moe and Churchill. After waiting a few weeks for what seemed like a simple request, they decided to work the stats out themselves, using the obituaries columns from the *Latrobe Valley Express*. Voices of the Valley members Dinah Tarasinski and Michael Gunter went to work, tallying up the deaths notices from 2014, and comparing them to 2009–2013. After a month they had some numbers for Ron, who graphed them up.

'I thought we might get, like, a little bit of an increase in deaths – but not 42 per cent.' (In March, there were ninety-one deaths instead of the five-year average of sixty-four.) 'And I just went, "What the fuck? This can't be right . . . "'

Ron took the graphs straight to the committee that Wednesday. People took one look at it and said, 'This is dynamite – what do we do?' The group had lost all faith in Lester and the Department of Health by this point. They also felt abandoned by local MP Russell Northe. Ron felt like Northe 'was here and seemed to be in to bat to start off with . . . Then he disappeared. He became Energy Minister, and stayed in Melbourne.'

Northe 'absolutely rejects' claims that he was absent during the fire. 'Hand on heart, I would say that Rosemary Lester, Craig Lapsley and many others would've been absolutely sick and tired of me by the time that event was over, because I rang them every day to express my concerns, and the concerns of my community. Maybe I didn't advertise that enough. Maybe I didn't go out there and say, "I've done this and I've done that", but I *was* doing it.'

Voices of the Valley decided to ask the only person they felt they could trust: Bernard Teague. By Friday 15 August, the group had drafted a letter and emailed it to the Inquiry, even though submissions had closed weeks earlier. For Ron and others, because of 'all of the lies and misinformation' circulating around the Latrobe Valley via official channels, 'there was a real heartfelt dependence on the Board and the Inquiry. Teague was the guy. Those three on the Board [Teague, Catford and Petering] – we trusted them, we had nobody else.'

The Inquiry Board responded 'really well' to the eleventh-hour letter. Although the Board couldn't include the information in their Inquiry, which had already passed into the write-up phase, they acknowledged that it was worthy of further investigation. Ron was relieved. 'They told us that this was serious [information]; that they would definitely not write in their report that there had been no deaths; and that they would forward it to the Coroner and the Department of Health for investigation. It felt like a good outcome, like we'd done the right thing – and that it was being looked at, being taken seriously.'

#### BIRTHS, DEATHS AND MARRIAGES

The Hazelwood Mine Fire Inquiry Report was launched by Teague at the Morwell Bowls Club on Monday I September 2014. The Report reserved some of its harshest criticism for Dr Rosemary Lester's decision to not issue temporary relocation advice for 'vulnerable' Morwell residents until 28 February 2014:

> On 12 February 2014, the Chief Health Officer was aware that the Fire Services Commissioner considered that the mine fire would burn for at least one month . . . the Board considers that the Chief Health Officer had sufficient information to issue the temporary relocation advice shortly after the weekend of 15 and 16 February 2014.

> The Chief Health Officer's advice . . . was provided too late. While air quality did fluctuate during the fire, this does not justify taking a 'day-to-day' approach to public health

advice in connection with smoke from the fire that was predicted to burn for at least one month and was going to give rise to cumulative exposure . . .

The Report made eighteen recommendations, twelve to the state and six to GDF Suez. There was a striking focus on PM2.5 particles: recommendations included for the EPA to set up mobile, rapid-response air quality monitoring stations, able to travel to disasters to measure levels of PM2.5, carbon monoxide and ozone and provide information to decisionmakers immediately. The Report argued for the need to review and revise the state's PM2.5 Health Protection Protocol and draft a 'national compliance standard for PM2.5'. Teague also recommended that the Department of Health's impending ten-year health study of Morwell residents be extended to 'at least twenty years', stressing that this study needed to be 'independent'. Ron and Tara were cheered, if only slightly. Ron was worried the health study would be more of a 'death study', an exercise in coffin-counting with no actual benefits for all the people still living in homes laced with coal ash.

The day after the Hazelwood Mine Fire Inquiry Report was launched, Voices of the Valley received an email from Births, Deaths and Marriages, providing them with the statistics they had requested four months earlier. This information took up one A4 page.

Once Ron had crunched the official numbers, he received some 'very unexpected results'. To start with, there was actually a *drop* in deaths in Morwell in February and March. This was baffling at first, until Ron and Tara remembered how many people had left Morwell during the fires. If the news reports of 6000 self-evacuations were accurate, that was nearly half the town. The second surprising result was a spike in deaths in both Traralgon and Moe-Newborough. Traralgon is directly downwind from Hazelwood mine, so that was fairly self-explanatory. The key to the Moe-Newborough stats, Ron hypothesised, was the geography. Heavier-than-air pollutants, such as PM2.5 particles, carbon monoxide and ozone, naturally settle in valleys and can take a long time to disperse. The towns of Moe and Newborough are located at the bottom of a broad valley that stretches all the way to Warragul, surrounded by hills on all sides. The only low point where polluted air could escape was across Lake Narracan, just down the road from Ron's house.

Voices of the Valley prepared to contact the media. They started with the ABC's 7.30. The ABC was keen to run the story, and journalist Madeleine

Morris contacted Professor Adrian Barnett, asking him to analyse the Births, Deaths and Marriages data. Barnett was 'happy to talk about the health effects of air pollution, because I think it's an issue that the public underestimates'. After conducting what he called a 'very straightforward analysis', Barnett found that there had been between ten and thirteen extra deaths, after accounting for other factors such as excess deaths from heatwaves. Barnett was 'not at all surprised' by the figures.

'This is not news to people like me who've been working in the area [of air pollution and public health]. I fully expected there to be an increase in death rates. I fully expected it to be in the 10 to 20 per cent range, which is exactly where it fell. We've got a known killer, we've got a situation we've seen a hundred times before around the world . . . If there had been *no* increase in deaths, that would have been the biggest surprise.'

But before the ABC could assemble a feature story, they needed a 'case study': a suffering face to bring the percentages to life. The strongest possible case study would feature the bereaved family members of someone who had been unambiguously healthy before the fires, and who was now dead. Tara, Julie, Dee and Wendy contacted a number of locals with health problems ranging from multiple heart attacks to bleeding eyes, but none of their stories were quite good – that is, bad – enough. After a couple of weeks of failed talent-scouting for trauma, the group was demoralised. Tara felt like she had become 'one of the Grim Reaper's telemarketers'.

Finally, just when Voices of the Valley were ready to give up on television coverage and contact the local newspaper, ABC Victoria dispatched a camera crew from Melbourne and told Wendy to get as many committee members in her living room as possible. Wendy and Ron did interviews while the group sat in the background pretending to pore over health data. It was, in Ron's words, 'a bit of *lights, camera*, *Wendy!* Wendy did the pretty face, and I did the facts and figures.' Ron and Wendy condensed the last six months of investigation and health monitoring into the pithiest sound bites they could manage.

Just after the camera crew had packed up and were driving back to Melbourne, Wendy received a message from a local woman, Kiery-Anne Clissold. Kiery-Anne's 46-year-old partner, Harry McCormack, had recently died of a brain aneurysm – which is one of the potential effects of exposure to high levels of PM2.5 particles. Wendy called the ABC, and the camera crew did a U-turn and got their case study. The story aired the next night, leading the Victorian edition of 7.30. Tara, Ron, Julie, Dee and Dinah came over to Wendy's house to watch it. Considering they were about to watch a news report about aneurysms and epidemiology, it was a remarkably cheerful gathering. Dee, grinning ear to ear, was wearing a homemade headband with little yellow birds bouncing on springs – it was her 'personal air monitoring device'.

7.30 started. The name of the Morwell story was 'Fatal Fire?'

The group cheered. 'Anyone in Morwell can understand that message!' Dinah said, to raucous laughter.

Kiery-Anne's story was simple, and brutal. 'He never suffered a headache in his life,' she said of her partner. 'He was as fit as a Mallee bull.' Kiery-Anne blamed the smoke for Harry's sudden death.

Next the ABC had an interview with Professor Barnett, who made a very strong case for a spike in deaths.

'Given the [Births, Deaths and Marriages] data, I was able to look at whether there was an unusual number of deaths during February and March in 2014. My analysis showed there's an 89 per cent probability that there was an increased risk of death during that time. [There] was about a 15 per cent increase in deaths, which translates to around eleven extra deaths for the four postcodes.'

Next, the ABC cut to a carefully worded denial from a Department of Health email:

"... no increase in deaths *in Morwell* during the period of the Hazelwood open-cut coalmine fire ..."

When the story finished, 7.30 crossed to a live studio interview with then-Opposition Leader Daniel Andrews. Before Andrews was interviewed about the East West Link, host Josie Taylor asked him about the story he had just seen.

'Do you think that the Mine Fire Inquiry should be reopened?' Taylor asked.

'I think that it should be, Josie,' Andrews replied. He started saying something else, but in Wendy Farmer's living room it was drowned out by a huge collective '*Yes!*'

#### MAKING MORWELL MARGINAL

In August, Tracie Lund's life took another unexpected turn. She was approached by Latrobe Valley 1st – a newly formed political group that contained some Voices of the Valley members, including Wendy – who asked Tracie if she would consider running as an independent candidate in the upcoming state elections. Latrobe Valley 1st were inspired by independent federal MP Cathy McGowan's successful 'Voices 4 Indi' campaign in northern Victoria in 2013. Latrobe Valley 1st's new president, Gilio Barbara, had been a staunch Labor Party member for decades, but had jumped ship and was keen to try something new. At first Tracie thought they were crazy asking her, especially since she hated public speaking, but she came around to the idea and decided to 'have a go'. On the back of widespread community dissatisfaction with Russell Northe's performance during the mine fires, Northe's 13 per cent margin from 2010 was looking shaky, and there was the slimmest of chances that Tracie could win the seat. At the very least, she could try to make it marginal.

A central part of the Latrobe Valley 1st election platform was a plan to prioritise and accelerate the rehabilitation of Hazelwood mine, which they claimed would generate 400 jobs for a twenty-year period as well as preventing future disasters. The Hazelwood Mine Fire Inquiry had been disappointing when it came to rehabilitation. It had recommended 'an assessment of the most effective fire protection for the exposed coalfaces', essentially a non-binding recommendation. The Inquiry Report had also been silent on the issue of the Hazelwood mine rehabilitation bond. GDF Suez currently had a \$15 million bond, which they would lose if they didn't rehabilitate the mine properly. The problem, as Environment Victoria saw it, was that proper mine rehabilitation would cost at least \$80 million, possibly as much as \$200 million. 'Financially, it could make more sense for the company to sacrifice its bond and abandon the mine without carrying out rehabilitation works.' Something more had to be done, and turning mine rehabilitation into a political issue was one way of making it happen.

The morning of Saturday 29 November 2014, Victoria's state election day, was blue-skied, beautiful and uncomfortably warm. After six weeks of hard-core campaigning, Tracie Lund was very relieved that this day had finally come.

The first polling booth Tracie and her husband Simon visited was at Liddiard Road Primary School in Traralgon East. When they arrived there were already four volunteers wearing bright-orange 'Vote I Tracie Lund' t-shirts outside the booth. 'Thank you for allowing me to be part of the team!' said one excited middle-aged lady who had never been involved in politics before.

At Liddiard Road Tracie bumped into Jadon Mintern, the fresh-faced 24-year-old ALP candidate. At the beginning of November, Labor had tried to convince Latrobe Valley 1st to preference Mintern. The polls were suggesting the election was going to be close, with Northe and Mintern both on about 40 per cent of first preferences, and Tracie on roughly 10 per cent. This meant that Tracie's preferences could be the difference between Northe getting re-elected and Mintern snatching the seat. Since the 'Fatal Fire?' story on 7.30, Labor had promised a number of times to reopen the Mine Fire Inquiry, to 'investigate the reported spike in local deaths and consider options for the mine's rehabilitation'. But as much as Tracie wanted to see the back of Northe, she wasn't convinced that Mintern - a career politician, 'groomed from a very young age' and belonging to 'right Labor' - would make a better advocate for the Latrobe Valley community. While she was pondering the decision, Tracie got in touch with Tony Windsor, the recently retired independent federal MP. Windsor's advice was clear.

'Preferencing is death for an independent,' he told her. 'You're a community campaigner, and you may come back and run again – but the minute you preference one [party] over the other, you've sold yourself out.' Tracie decided to run an open ticket.

Outside another polling booth, there was a guy from Hazelwood Power Station sporting an orange Tracie Lund T-shirt and handing out Latrobe Valley 1st pamphlets. He thought Russell Northe was 'pathetic' during the fires. 'Russell who? Didn't hear him. He sooked out.' The worker thought the mine fire 'was a big fuck-up, the whole lot of it, to be honest . . . I think they should've evacuated the whole town in the first week.' He had been a rustedon Labor supporter for decades, but was ready for a change. After noticing that Tracie Lund had 'actually stood up and said a few things' about making the mines safer, he decided, 'Oh well, I'll put my money where my mouth is for a change.'

Finally, after eight hours of booth-hopping, Tracie and Simon made their way to the Traralgon RSL for the Latrobe Valley 1st election party. They were some of the first ones there, so they had 'a bit of breathing space', as well as a couple of glasses of chardonnay.

Around 6.30 p.m., the bar staff turned on the TV screens. Morwell was being described as 'too close to call'. Tracie and Simon drank to that.

Over the next couple of hours, fifty volunteers in oversized orange t-shirts converged on the RSL to watch the vote count. Wendy and Naomi Farmer were there, and Dee Nicholson, and Simon Ellis – who had driven 300 kilometres that day with Tracie Lund signs all over his SUV and speakers on the roof, calling out 'Vote I Tracie!' to all the polling booths. People crowded around white circular Formica tables enjoying their pub meals, some halfway drunk, everyone jubilant. At each end of the long room the election results played soundlessly on big screens. The infographics were overwhelmingly Labor-red, with bright patches of inner-city Greengreen. It was looking bad for the Liberals, very bad for the Nationals. Every few minutes the count for Morwell flashed up, and people bellowed.

Even though Tracie wasn't going to be elected, it felt like a victory party. Latrobe Valley 1st had set out to make Morwell marginal, and they had succeeded spectacularly on that front. It was so marginal that a result probably wouldn't be announced that night. Both Russell Northe and Jadon Mintern would be sweating bullets. Tracie's brief campaign had made sure that this election had been very much about the mine fire, not just those perennial campaign favourites, education and jobs.

As Tracie stepped up to the microphone, people hooted and cheered and clapped a drum roll on the pub tables. She looked out into the room full of orange t-shirts, and beamed.

'It's very exciting,' Tracie said. 'I've had three, two

and a half wines, so I'm on a roll. I'm, um . . .' she trailed off, and everyone laughed. 'As most of you know, I really don't like doing this, so I've got lots of notes . . .

'We have a lot to celebrate. Regardless of who wins the seat, we have succeeded in putting the major parties on notice. It's only been four months since Latrobe Valley 1st started, and it's only been two months since I was preselected as the community – sorry, by the community as the independent candidate. In that time, together we've given the major parties a huge shake-up. The seat is now marginal, it's looking good, that's great!

'Labor looks very likely to form government, and we've succeeded in forcing a number of election promises out of them, including reopening the Hazelwood Mine Fire Inquiry, to look at the increased death rate and at mine rehabilitation.'

This got a boisterous applause, especially from Wendy and Simon's table.

Tracie looked up from her notes.

'So: well done, team, to everybody here, and I'm just humbled by the support, and I want to thank you all, and hug you all, and drink lots of wine!'

'Tracie, you're a friend to all of us!' a woman yelled.

On the screen, an election graphic flashed up.

Russell Northe was on 49.8 per cent, and Jadon Mintern was on 50.2 per cent. Not only was the seat thoroughly marginal, Northe was behind! A cheer went up in the Traralgon RSL.

'See ya later, Rusty!' someone yelled.

An older man sitting near the bar chuckled with grim satisfaction.

'We gave him a foot in the arse,' he said, and finished his pot.

A few minutes later, Denis Napthine conceded. The Coalition had just become the first one-term government in Victorian for fifty-nine years. The last time this had happened was back in 1955, when the unlucky Premier had been John Cain Senior, the man who had 'saved' Morwell from destruction by the SECV in the 1940s. Daniel Andrews was the new Premier of Victoria, and he had promised to reopen the Hazelwood Mine Fire Inquiry.

#### EPILOGUE

The Morwell election had to be recounted. For a long, breathless moment, there was no local Member for Morwell. But after a couple of days Russell Northe edged ahead, and on the fourth day Jadon Mintern conceded. The ABC reported that Northe 'blamed the 11.5 per cent swing against him on electoral boundary changes, the Hazelwood mine fire and the popularity of independent candidate Tracie Lund, who picked up about 11 per cent of the primary vote.' This was the largest swing in the state.

In the days after the election, Daniel Andrews confirmed his pledge to reopen the Hazelwood Mine Fire Inquiry. The *Latrobe Valley Express* quoted Andrews saying that 'top of the list' for the Inquiry is 'the notion that lives were actually lost . . . I think that is an outstanding matter that needs to be re-examined.' In February 2015, Professor Adrian Barnett announced that updated figures from Births, Deaths and Marriages show there is now 94 per cent certainty that there was a spike in deaths in Traralgon during the mine fire.

At the time of writing, Voices of the Valley were pressuring the state Labor government to set a date to reopen the Inquiry. They stressed that the new Inquiry needed to examine health impacts across the entire Latrobe Valley, not just Morwell.

In late 2014, Monash University was selected to carry out the long-term health study for the Department of Health. On 27 January 2015, Judi Walker, lead researcher of the new Hazelwood Mine Fire Health Study, declared that they would 'make sure that no stone goes unturned' in assessing the full impact of the fires.

Two days later, Dr Rosemary Lester announced her imminent retirement as Chief Health Officer. Lester, aged fifty-seven, had been planning to retire 'for two years'.

GDF Suez continues to mine brown coal and burn it in the Hazelwood Power Station, providing Victoria

with 25 per cent of its electricity needs. It is unclear whether anyone employed at Hazelwood lost their job, or experienced any kind of disciplinary action, as a result of their actions during the fire.

On Friday 23 January 2015, 'tough new mining regulations' were announced by Daniel Andrews and new Minister for Energy and Resources Lily D'Ambrosio. As recommended by the Hazelwood Mine Fire Inquiry, these regulations include 'a risk assessment of the likelihood and impact of fire in the worked-out areas of their mines and an assessment of the most practical and effective fire protection of exposed coal surfaces'. Mine operators will have to report annually, and publicly, on the progress of their mine rehabilitation works. A company's failure to comply can mean fines of up to \$360000, and ultimately the loss of their mining licence. Andrews said, 'What happened at Hazelwood must never be allowed to happen again.'

Another fire season comes and goes. Morwell holds its breath.

#### A NOTE ON SOURCES

Regrettably, the stories of the dozens of GDF Suez employees and contractors who worked in the mine during crucial moments of the fire are almost entirely absent from this book. GDF Suez bans its employees from speaking to the media under any circumstances, under threat of dismissal, and has done so for years. Such media 'gags' are common practice in an increasing number of workplaces.

#### FURTHER READING

- Planning Power: The Uses and Abuses of Power in the Planning of the Latrobe Valley, by David Langmore
- *Heart of the Valley: A History of the Morwell Municipality*, by Stephen Legg
- · A History of the Morwell Open Cut, by J. A. Vines
- The Hazelwood Mine Fire Inquiry Report 2014, by Bernard Teague, John Catford and Sonia Petering
- hazelwoodinquiry.vic.gov.au (includes full transcripts of public hearings)
- 'Colleen's Courage' (Colleen Robinson's fundraising page): facebook.com/caniborrowakidney
- Voices of the Valley: votv.org.au; facebook.com/groups/VOTV1
- Latrobe Valley 1st: lv1.org; facebook.com/LV1st

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## OTHER PENGUIN SPECIALS YOU COULD TRY:

Beauty's Sister James Bradley

Rudd, Gillard and Beyond Troy Bramston

Governor Bligh and the Short Man Peter Cochrane

Utzon and the Sydney Opera House Daryl Dellora

> Beyond the Boom John Edwards

The Ellis Laws Bob Ellis

The Badlands Paul French The Rise and Fall of the House of Bo John Garnaut

> The Deserted Newsroom Gideon Haigh

> > End of the Road? Gideon Haigh

The Adolescent Country Peter Hartcher

> Life in Ten Houses Sonya Hartnett

The Simple Life Rhonda Hetzel

Does Cooking Matter? Rebecca Huntley

Take Your Best Shot Jacqueline Kent

What Would Gandhi Do? Michael Kirby

> A Story of Grief Michaela McGuire

The Tunnel Dennis McIntosh

Mistakes Were Made Liam Pieper

Ballots, Bullets and Kabulshit Toby Ralph

Is There No Place for Me? Kate Richards

> Salad Days Ronnie Scott

The First Dismissal Luke Slattery

Reclaiming Epicurus Luke Slattery

Dying for a Chat Dr Ranjana Srivastava

You're Just Too Good To Be True Sofija Stefanovic