

Southdown Fire 20th – 27th December 2008

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The fire at the Southdown freezing works in Hugo Johnston Drive in Penrose began just before 6pm on the 20th of December and quickly spread throughout the old complex. At the peak of the fire over 80 fire-fighters battled the large blaze using aerial trucks with ladders to get high enough and cranes to knock down walls so they could gain access to the seat of the fire. The three storey building was engulfed in flames and the fire-fighters had to control the fire from the outside as it was not safe to enter the building. At one stage nearby factories were also threatened by the blaze. Luckily no one was injured.

During the fire the NZ Fire Service were the controlling agency having to deal with any issues that arose. The main issues (other than trying to put the fire out) related to safety of the public and included smoke encroaching on nearby businesses, roads, railway lines and residential properties nearby as well as ensuring the safety of the public/ other agencies and the media who were all trying to get as close as possible to view the fire. Fortunately at the time of the fire a light north westerly breeze was blowing which allowed the plume of smoke to rise up and over the city and not cause too much of problem to motorists driving during the peak hour. One problem that the fire service did have was trying to ascertain what materials were on the site as there were several large silo's present as well as a 25 tonne LPG tank that they were particularly concerned about. Luckily the fact that it used to be used as a freezing works meant that there was a very good supply of water to the site. The NZ Police provided traffic control etc.

Once the fire was under control the fire service requested the aid of the following agencies to help them:

- Auckland City Environmental Health
- Auckland Regional Public Health
- Auckland Regional Council
- NZ Police arson investigators
- Fire Investigators
- Dowdell & Associates
- Security

The main area of concern was the large amounts of asbestos containing materials known to be present on the site and finding out whether there were any health risks associated with the plume of smoke to people living and working in the surrounding businesses and residential areas. The Auckland Regional Public Health Service contracted Dowdell and Associates to carry out air monitoring tests downwind of the blaze. These tests all came back well below the Internationally acceptable guideline of <0.01 respirable fibres per mL of air. The ARC were also concerned about debris from the fire entering the surrounding environment but checks carried out by them showed little contamination apart from the southern end of the site and the railway corridor running along the eastern side of the site where asbestos fragments had accumulated. The fire itself took over two days to get under control and a further five days to completely extinguish. This was due to the huge amounts of fuel (wood/plastic/insulation material etc) present and the difficulty experienced by the fire-fighters in getting water to the seat of the fire. Large cranes were brought in and used to knock down walls and remove material so that water could be poured into the hotspots.

Once the fire was extinguished an asbestos assessment was requested by the Auckland Regional Public Health Service to get a handle on the extent of contamination present and what procedures and protocols would be needed to be put in place. Asbestos containing materials in NZ historically were restricted to the amphiboles, crocidolite (blue asbestos) and amosite (brown asbestos) and the

serpentine variety chrysotile (white asbestos). Chrysotile was the most commonly used fibre accounting for about 95% of the world production. Importation into New Zealand of amosite and crocidolite in its raw fibrous state was banned in 1984 whereas chrysotile was not banned until 2002. In the case of the Southdown site only chrysotile and amosite were found. The report from Dowdell and Associates stated that there were significant quantities of friable asbestos laying amongst the rubble and would mean that any demolition would need to be carefully controlled and monitored and that considerable quantities of material would need to be disposed of as asbestos waste. As well as the site being contaminated it was also pointed out that the southern and eastern areas outside the site were contaminated with asbestos debris (predominantly corrugated and flat sheet asbestos cement fragments).

On the 27th of December the fire service gladly handed over the site to Auckland City to control as the lead agency. As Senior Officer it fell on my shoulders to ensure any health risks were mitigated. A meeting was held with the owners of the site and insurance investigators (representing the insurers) and a plan put together on what would be required. As the area was well known as a meeting point for vagrants a security company was called in immediately to erect fencing around the site and provide roving patrols every 30 minutes until the site could be made secure. The areas where asbestos contamination was known to be present was required to be kept dampened down by installing a series of sprinklers and access restricted to only authorised personnel wearing suitable protective equipment and facemasks. The contractor employed to remove the contaminated material needed to be a ticketed asbestos removal contractor well versed with the types of asbestos present. Continued airborne monitoring was required to be carried out and reports sent to the relevant agencies. All existing utilities needed to be capped and open drains covered to prevent contamination spreading. The removal of the fire debris from outside the site was the first major priority and a team of workers combed the area picking up and removing all the asbestos fragments (luckily this was made easier because the railway corridor was undergoing routine maintenance at the time and trains were not running). The next issue was to remove any other dangerous materials from the site which included a few tonnes of half burnt rotting meat and a large LPG tank. Following this my main concern was ensuring that any elevated materials were made secure so that they didn't blow down onto the nearby power lines or onto the railway lines running beside the site in high winds.

The second phase of the works involved issuing demolition orders on all the buildings affected by the fire. This was quite a complex issue as there were already building consents lodged with council to remove the buildings and a lot of discussion was held between building inspectors and myself on what process should be followed and who legally was responsible. The outcome of the discussion was that it was perceived that the demolition order took preference and the application for building consents should be cancelled. Another issue that arose during my investigation was the continued presence of two businesses who refused to move out of the site. Although they weren't in the contaminated zone their utilities had been turned off. In the end I had to issue an Insanitary Building Notice which required them to leave the premises within 21 days due to the fact that they had no power, water or sanitary services. The other 27 businesses on the site relocated following the fire.

A second meeting was held with the owners and a detailed demolition management plan requested. At this stage we are awaiting receipt of this plan so that we can grant approval to begin the required works. Once demolition approval is given the demolition is likely to take up to 10 months. On-going air monitoring will be required throughout this entire period. Any uncontaminated material will be salvaged where possible – e.g. bricks and steel (waste minimisation). Contaminated material will be sent to EnviroWaste (Hampton Downs) in plastic lined and sealed bins. On-going monitoring of site by the environmental health team will be required to ensure compliance with the demolition management plan and we will be keeping the ARC advised of any issues when and if they arise.

We are also aware that the current owners are being prosecuted for breaching their Resource Consent at a nearby site so we will be keeping a close eye on them and ensuring they follow the approved demolition management plan.