

Appendix VII
Record of detailed site inspections

Memorandum

To Brian Calkin: Inspectorate Manager
From Bruce Pope: Investigating Officer
File F02/2 UIR400
Date 31 May 2001

Detailed inspection of alleged Dioxin dump sites

On Monday the 28 May 2001 and Wednesday the 30 of May 2001 detailed inspections of 22 alleged Dioxin dump sites was carried out by seven staff from the inspectorate section of the Taranaki Regional Council. The inspections involved walking all the sites on a shoulder to shoulder basis.

Site A – Lawry St Site

This site is situated on the corner of Devon Street West and Lawry Street and is adjacent to the Mangaotukutuku Stream. A full inspection from west to east parallel with Devon St West was undertaken, including a detailed inspection of the steep slope to the Mangaotukutuku Stream. Possible leachate points were found on the steep banks of the Mangaotukutuku Stream. The slope comprises unconsolidated soils covered in weedy vegetation.

Site B – Seaview Rd Site

This site is situated on the corner of Devon Street West and Seaview road and is adjacent to the Mangaotukutuku Stream. The site is bounded by a garage/service station and a car painting business to the south. A full inspection of the site and adjacent stream banks was undertaken. No evidence of contamination was found.

Sites C – Pylon 3 Site and V – Centennial-2 Site

The Pylon 3 site comprises an area of land between the IWD north-west boundary and Back Beach extending to Mt Moturoa, below a pylon outside the north-west corner boundary of the IWD plant, and extending to the beach. It is a relatively large area and includes a significant area of public reserve. There is a gully at the south-western end of the site that extends from the plant to the coast line. At the head of this gully there is a constructed stormwater pond located on, and for, the IWD site.

A beach walk was undertaken of Pylon 3, Centennial Drive and Centennial-2 sites and two leachate sites were found and marked with spray dye, they were:

- On back beach access track
- North of back beach access track

A full sweep of the Pylon 3 site between Centennial Drive and IWD fence from west to east was undertaken. Some plastic material was found on the surface north of Pylon 3 on the 4 wheel drive track, no other evidence of contamination was found.

Ca – Centennial Drive Site

This is a reserve area above the former stormwater discharge from the office block of IWD.

Inspection of site Ca showed that the area, a slight gully, has been planted in trees and is a reserve. Planting and tree release spraying has been undertaken in the last three months that would negate further investigation.

Site D – 34 Rangitake Drive Site

This is a residential property extending from Rangitake Drive to the Herekawe Stream. A pole house is located at the top of the section near the road. The remainder of the section is a grass terrace and steep vegetated bank down to the Herekawe Stream.

A full inspection was undertaken of the back of this section and there was no evidence of leachate and no foreign objects were found.

Site Da – 44 Rangitake Drive Site

This site is at the southern turnaround of Rangitake Drive and includes the house site. The house is adjacent to a vacant section, which is also included as part of this site, the street number for this section is 42 Rangitake Drive. The road frontage is tarsealed and concreted and a layer of lawn is on 44 Rangitake Drive. The bottom of the sections are relatively overgrown and is adjacent the Herekawe Stream. A full inspection of the area was undertaken and no evidence of dumping was found.

Site E – Omata Reserve Site

This site is directly on the western side of the Herekawe stream. East of the Methanex tank farm. The site is situated on New Plymouth District Council reserve land and has been planted with trees in previous years. A full inspection of the western (true left) bank was undertaken, the area is covered with thick undergrowth and no leachate or unusual problems were found.

Inspections were also done across the remainder of the property on the western side of the site, nothing obvious was found in this area.

A further full sweep of the eastern side (true right) of the Herekawe stream was also undertaken this showed a substantial lump of concrete 20m downstream from the sewerage pipe or start point, this was situated at the back of No 34 Rangitake Drive.

Also found on right hand bank:

- Novaflow at top near mesh on empty back section adjacent to 26A Rangitake Drive.
- Large cutting behind 26A Rangitake Drive on downstream side of house, midway between the cabbage trees and house
- 20metres downstream of 26A Rangitake Drive section boundary, ground water flow less than 1metre up from stream level

As part of the inspection weed eaters were used to cut away substantial excess woody growth. This also enabled access for GPR activities.

Site G – Marfell Park Site

The Marfell Park site is a former municipal landfill. The allegation received by the Council was that herbicide contaminated waste were disposed in an area near the 'top' (south-eastern) end of the former landfill site. According to the New Plymouth District Council, leachate from the former landfill is intercepted and discharged via a pipe to the Mangaotukutuku Stream. The discharge point is approximately 600m north-west of the alleged disposal site.

There is iron oxide staining present at the leachate discharge pipe and in the accumulated sediment immediately below the pipe.

The former landfill site has been developed as sports playing fields. Down gradient of the landfill site is a BMX track and a children's play area.

Two inspections of the site were undertaken, the first sweep from the eastern side of the park from the Cook Street end through the BMX track to Grenville Street. The second sweep from Grenville Street to Cook Street on the western side of the park. Several wet areas were found on the park during these sweeps. However, no other signs of leachate or surface contamination were discovered. Possible sampling sites could be from stormwater pipes in manholes on site or at the discharge point to the Mangaotukutuku Stream.

Further inspection of the known leachate discharge point from the old dump to the Mangatuku Stream was also undertaken, this site is off Endeavour street. A full inspection of the area was undertaken no signs or odours found.

Site H – Ngamotu Domain Site

The Ngamotu Domain site is a former municipal landfill. The site has been grassed and is now used as playing fields. The landfill site is on the western side of a gully formed by the Mangahererangi Stream. Several full inspections of the eastern side of the park, from south to north, showed signs of some odours which appeared to be leachate odour from the old dump site. The remainder of the site was inspected methodically with no other signs of leachate being found. Possible sampling sites were found on the eastern side of the park.

Site I – 7A Squire Place Site

The Squire place site is in a gully immediately beside the Ngamotu Domain. This site contains a stormwater pipe that allegedly contained leachate, which was discharged from the Ngamotu Domain landfill. A full inspection of the western side of the Squire Place was undertaken, this area is between the Ngamotu dump site and the Mangahererangi Stream which flows to Ngamotu beach. This stream would take leachate from the old dump site. Although no odours or strange materials were found during this inspection it was noted that some debris and discoloured water was evident on the opposite stream bank (true right). Samples recommended to be taken at the end of the discharge pipe and at the bottom boundary of the property.

Site J – Belt Road Site

This site is situated at the end of Belt road, over the railway line and on the coast. The area is grassed and is regularly mowed. It is immediately on the cliff face sloping to the foreshore of the Tasman Sea. Inspection did not indicate any leachate discharge points.

Site K – Victoria Road, Oakura Site

This site is on the first farm on the right up Victoria Road off State Highway 45 at Oakura. No leachate discharges were found.

Site M – Beach Road-1 Site

The Beach Road site is located at the base of a gully and incised into a flat terrace area. There is a wetland area at the base of the gully and adjacent to the alleged disposal site. A full inspection from the sea fence to Centennial Drive was undertaken, including an inspection of the wetlands area. No evidence of any discharges or dumping was found.

Site P – 26A Rangitake Drive Site

This site is at the rear of a residential property and backs on to the Herekawe Stream. The rear of the section comprises two grass terraces before steeply sloping to the Herekawe Stream. The steep bank is predominantly covered in kikuyu grass. A full inspection was undertaken along the back of 26A Rangitake Drive. This showed the following:

- Wet area at the lowest level down from the house
- 6 metres further east a wet area with an iron oxide sheen
- A rusted, crushed drum was located at stream level below the site, adjacent to the end of boundary fence. There was no evidence that this drum had contained agrichemicals. The drum has been removed.
- Leachate evident

Site Q – Rifle Range Rd/Bewley Rd

This site is located on Rifle Range road next to the true right bank of the Waiwhakaiho River and was used as a landfill site. It is now an industrial area.

A full inspection from west to east of the true right bank of the Waiwhakaiho River from the waters edge to Bewley Road was undertaken. Start point was GPS2605942E-6238969N. The following was found:

- Between start point and smart Road, various drums, a stormwater discharge pipe and some leachate.
 - Between Smart road and Struthers Place, three stormwater pipes, small amount of rubbish and one leachate point.
 - Between Struthers Place and Vickers Road, one 30 metre long leachate discharge, stormwater pipe and various pieces of metal.
- Between Vickers Road and the finish point, GPS2606845E-6239729N, Mangaone Stream, six stormwater discharge pipes.

Site R – Beach Road-2 Site

A flat paddock situated on the old IWD farm. No surface water discharge points are possible and there is no sign of any substance relating to drums.

Site X – Roto Street Site

This site consists of a gully adjacent to a recent housing subdivision, however no houses have been built at this stage. Fill material had been previously disposed of in the gully, particularly on the true left side near the head of the gully. Some concrete and asphalt rubble is present at the surface over part of the site. A small stream has been re-directed across and down the true left side of the gully. At the base of an exposed bank adjacent to the stream a seepage zone exists with numerous seeps. There is significant iron oxide staining around these seeps and in the streambed in the immediate vicinity.

A full inspection from the recent housing subdivision to the bush area was undertaken. It was noted that the drain that runs parallel to the site was discoloured with iron oxide.

Site Z – Ngahoro Site

The Ngahoro site is a known IWD disposal area where drums containing herbicide manufacturing wastes had previously been disposed. The drums, contents, and surrounding soil were removed for disposal at the Waireka landfill facility, and site clean-up undertaken, between 1981 and 1985.

The Ngahoro site is located on the seaward side of Centennial Drive approximately 2 km west of the IWD plant and 200 m east of the Beach Road-1 site (Site M). The site is located on the edge of an eroded terrace with steep gullies on the coastal side and flat terrace extending inland. At the base of the gullies, swampy/wetland areas feed small streams flowing towards the coast. There is likely to be a groundwater divide at the site with most groundwater flowing towards the northern gully and a lesser amount flowing to the southern gully.

A full inspection from Centennial Drive to a fence by sea was undertaken. A wet gully to the north of the site was also inspected. No visible signs of pollution were found.

Site Ze – Tank 3500

This is a flat area of farm land on the old Ivon Watkins Dow dairy farm. A full sweep from Centennial Drive fence line, past the Tank 3500 to a wetland/lake, then through wetlands area between lake and Centennial drive. There was no evidence of contamination in the wetland/lake and the surrounding area.

Site Zh – Car Park Site

This site is near the car park west of the Herekawe Stream on a walking track to the beach. No allegations of the presence of herbicide manufacturing residues have been made at this site. The reason this site was investigated and samples collected is to provide assurance to the public that the discharge is natural.

A full inspection showed no signs of any dumped material, however, at the beach end of the track there is a seepage zone with significant iron oxide staining and in the past the Council has received a number of enquiries regarding the rust coloured staining at the seepage zone.

Site Zi – Herekawe Cliff Site (Pylon 4)

The Pylon 4 site comprises the area below a pylon on the west boundary of the IWD property, extending to the beach. A gully extends from Pylon 4 and the south-western corner of the IWD site to the coast. A small stream flows down this gully and over the coastal cliff.

A beach walk was undertaken. Two leachate sites were found and marked with spray dye, they were:

- Near water fall and Hurricanes sign on cliff face
- North of the water fall area

Site Zk – Jury Site

This site is at the end of Norwich Avenue on the former Jury farm. Inspection showed some signs of broken concrete. No potential leachate discharge points were possible.

The following sites were not the subject of the detailed inspections reported above, for various reasons:

F – IWD-1 Site – on site at IWD and investigated later .

L – 23C Tahurangi Place Site – residential section, investigated later.

N – Waireka site – this is the subject of regular monitoring.

O – Pioneer Road Site– entrance way to Ngamotu Domain only.

T – Colson Road Landfill – subject of regular monitoring.

U – IWD-2 Site - on site at IWD and investigated later.

W – Herekawe Stream – current stormwater discharge subject to regular monitoring.

Za – 60 Marama Crescent - residential section, investigated later.

Zb - Buller Street Site – original IWD site. Investigated previously, sealed and covered with concrete.

Zc – Tarahua Road Site– Investigated previously, sealed and metalled.

Zd – Tasman Sea (Elliot St Outfall) – marine sites.

Zf – IWD-3 Site - on site at IWD and investigated later.

Zg – IWD-4 Site - on site at IWD and investigated later.

B E Pope
Investigating Officer