

Date: 11/10/2019

REF: CRC194083

## MEMORANDUM

From: Joe Harrison, Consent Planner

To: RMOG Decision Makers

SUBJECT: **NOTIFICATION RECOMMENDATION AND DECISION FOR  
CRC194083**

### INTRODUCTION

1. Waste Management NZ Limited (WMNZ) (“the applicant”) proposes to establish a waste processing and stabilisation facility at 305 Marshs Road, South Hornby, Christchurch (the site), adjacent to its existing transfer station at 301 Marshs Road. The applicant is applying for a resource consent from the Canterbury Regional Council (CRC) to discharge contaminants into air associated with this facility.
2. The proposed facility will eventually replace WMNZ’s existing facility located at 88 Francella Street, Bromley and is operating under CRC146330.
3. The application and Assessment of Effects on the Environment (AEE) were prepared on behalf of the applicant by Richard Chilton (‘the consultant’) of Tonkin & Taylor Limited. The AEE and other relevant information received from the consultant can be viewed on file (C19C/44871-2) and s92 responses (C19C/168380 and C19C/115756).
4. In addition, the applicant currently holds the following CRC consents related to the operation of this proposed waste management facility, these are:
  - CRC192911: land use for earthworks
  - CRC192912: discharge of construction-phase stormwater
  - CRC192913: discharge of operational-phase stormwater to land
5. The applicant also holds resource consents from the Christchurch City Council (CCC) (issued 11 December 2018) for the use of the site, heavy goods road access, sewage discharge and the storage and processing of hazardous and related substances (RMA/2018/2330).
6. The applicant has requested a duration of 35 years for the proposed discharge to air consent. No other consents have been applied for for this application.
7. I undertook a site visit to the WMNZ’s existing facility located at 88 Francella St Bromley on the 10<sup>th</sup> October 2019.
8. I recommend that application be limited notified to the owners and occupiers (residential dwellings and commercial sites) within 500 metres to the east and south of the site (outside of industrial zone) as I consider that the potential effects of this activity, particularly odour and human health are considered to be minor on them.

## BACKGROUND

9. To my knowledge two discharge to air (odour and dust) consents for waste management and transfer facilities have been processed and granted by CRC in the last 4 years, a summary of these consents and sites is provided below

### **CRC182795 - ERP Group Limited.**

This site is located 25 Spencerville Road, Christchurch legally, and is zoned for “heavy industry”. Surrounding sites is rural in nature and include waste paint and solvent processing yard, asphalt contractors’ yard, skip bin storage yard, truck yard and greenfield (undeveloped) industrial sites. The nearest residential dwellings are located 130 metres away. The site is used as a waste transfer centre, with the majority of activities occurring inside a large building, approximately 70% comes from skips and construction and demolition (C&D) waste and 30% from cafes, supermarkets and schools, no hazardous goods/wastes are to be processed onsite.

This consent was limited notified to all parties within 300m of the site in March 2018 and was granted in October 2018 for a duration of 15 years.

### **CRC154046 Envirowaste Services Limited**

The site is located at 481 Colombo Street, Christchurch and is zoned as “Business”, neighbouring sites (also zoned “Business”) are urban and commercial in nature and include a large format retail and trade supply outlets including Harvey Norman, a fitness centre and entertainment centre. The applicant proposed to use the site for the receiving, handling, sorting, processing and temporary storage of mixed waste materials, including:

- Construction and demolition waste;
- Business and commercial wastes;
- Domestic waste;
- Recyclable materials such as paper, glass, plastic, and ferrous and non-ferrous metals;
- Hardfill and cleanfill; and
- Roadside sweepings and stormwater cesspit wastes.

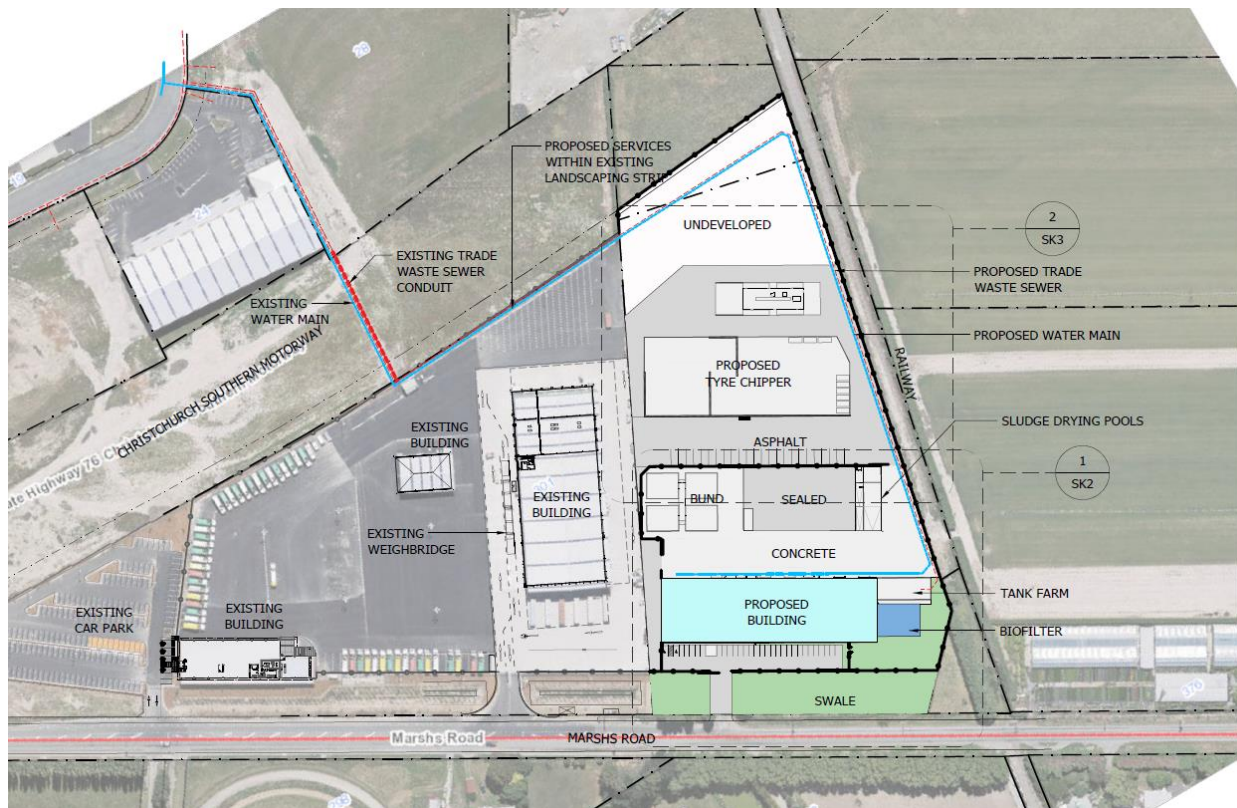
This consent was publicly notified in April 2015 and was granted for a duration of 10 years in September 2015.

## DESCRIPTION OF THE PROPOSED ACTIVITY

### **Overview**

10. The applicant has provided a description of the proposed activities in Section 4 of the AEE (Page 15). The applicant proposes to operate a new facility for the treatment and stabilisation of wastes, which will replace the existing operations at 88 Francella Street, Bromley. It is proposed that the new development will commence operations in June 2020.

11. The applicant currently owns 301 Marsh Road which is adjacent to the west of the proposed site, this site (301) is used as a waste transfer centre, it does not hold any CRC consents.



**Figure 1: Proposed Site Plan**

12. The site will receive a variety of wastes that are typically unsuitable for direct disposal to landfill or trade waste due to the properties of the waste (e.g., hazardous properties, strength or odour). The treatment processes will produce stabilised solids for disposal to consented landfill and waste water for discharge to the trade waste network within the parameters of a trade waste consent. There is no retail activity proposed at the site.
13. The following waste streams will be treated or managed on site:
- a. Organic wastes - grease trap waste, septage, etc.
  - b. Acid and caustic solutions containing heavy metals.
  - c. Hydrocarbon waste including residues from paint, ink, resins etc. and diesel/oil contaminated water.
  - d. Crush pit for oil sludges, greases, distillation residues (viscous still bottoms) and other high viscosity materials.
  - e. Laboratory waste.
  - f. Vegetables fats and oils.
  - g. Waste mineral oil (cleaned, processed water removal and balance sold).
  - h. Pesticides and herbicides.

- i. Small quantities of other miscellaneous wastes.
  - j. Used vehicle tyres.
  - k. Road sweepings and dirty water from hydro excavation.
14. Medical (cytotoxic) wastes, used, wash solvents (vehicle industry) and cyanide waste solutions from metal processing industries will not be treated on site but will be consolidated on site and transported off-site for treatment.
15. The proposed facility will comprise the following features, with the proposed site layout illustrated in figures provided in Appendix E of AEE (C19C44871-2):
- a. Building – office, store/workshop, laboratory, process and belt press area (3,000 m<sup>2</sup>).
  - b. Bunded tank storage areas (300 m<sup>2</sup>).
  - c. Bunded hydro-excavation sludge drying area (approximately 1,000 m<sup>2</sup>) and areas labelled 'BUND' and 'SEALED' (2,640 m<sup>2</sup>).
  - d. Biofilter (300 m<sup>2</sup>).
  - e. Undeveloped area (9,000 m<sup>2</sup>).
  - f. Parking, access and open yard area.
16. The main process area of the building will have building roof extraction vents to achieve an extraction rate of four building air changes per hour. This will exclude ventilation from the organic waste processing area (discussed below) which will be to the biofilter.
17. The site will be entirely impervious except for landscaped areas and undeveloped areas at the northern end of the site toward the Christchurch Southern Motorway (stage 2). It is proposed that all stormwater from roofs will be piped directly into Site Storm Water Swale.

### **Treatment of organic waste**

18. Several organic wastes will be treated on site, including wastes from septic tanks, cesspits, grease traps (food manufacture, restaurants etc.), latex, wine industry, sugar and dairy wastes from the wider Christchurch region.
19. Wastes will be loaded into a mix tank where the pH is adjusted to the levels required for trade waste discharge and sulphate concentrations are tested. A flocculent is added to the liquid and solids are allowed to settle. Decanted liquid is then stored in one of several holding tanks prior to being discharged to trade waste once appropriately treated to meet trade waste requirements.
20. A belt press will then be used to further separate the liquid and solid fractions of the waste. Separated liquids are transferred to holding tanks. The solids are then sent off-site for composting at an approved composting facility.

### **Heavy metal solutions**

21. Waste metal solutions to be treated on site will include wastes from electroplating operations, galvanising and timber treatment processes. Typical metals considered for this treatment process are copper, cadmium, zinc, arsenic, chromium and lead.
22. Treatment of metal solutions at the proposed Marshs Road Site is to take place in a vessel (reactor tank or crush pit) – it is currently undertaken in pits at the Bromley

site. The decanted liquid from the process will be transferred to holding tanks prior to discharging to the trade waste system following confirmation that the liquid waste meets trade waste requirements. The solid is then bulked and further consolidated as discussed below.

### **Residual solid waste**

23. Solid waste generated from processing of organic and heavy metals waste will be consolidated and tested at the site before transport to landfill. If required, the solid waste may be pH adjusted with lime and bulked to meet a spadeable criteria with wood waste.

### **Hydrocarbon waste treatment**

24. Absorbing viscous hydrocarbon waste materials and/or hydrocarbon contaminated soils (oil, diesel) onto sawdust and dry wood shaving or lime. Separating solids to go to land fill and liquids to be sent to organic treatment process.

### **Crushpit operations**

25. General hydrocarbons, including oil sludges, greases, distillation residues (viscous still bottoms) and other high viscosity materials are directed to the crushpits in the main process building. These materials are mixed with sawdust or lime to absorb the material and change it into a form that allows for easier disposal at a landfill. Contaminated metal drums are also crushed in the pits at times. Metal drums, for recycling, are crushed by a hydraulic press.

### **Laboratory waste**

26. A wide range of chemicals are potentially involved in the laboratory waste category. On receipt the wastes are sorted by a qualified chemist, according to the type of chemical and treatment involved.
27. Depending upon the toxicity, biodegradability and other characteristics this waste may be combined and treated by one of the above processes. If the materials cannot be safely treated in one of the on-site processes (e.g. solvent containing wastes) the material is stored, consolidated and transported to WMNZ Auckland or Wellington for treatment.

### **Vegetables fats and oils**

28. Fats (solid products) will be collected from clients in 200 L drums. These will be delivered to site and loaded into shipping containers and then transferred off-site for processing.
29. Vegetable oil is collected in 200 L drums or IBCs (intermediate bulk containers) and, upon delivery to site, is pumped into storage tanks. The oil is filtered during this process to remove larger material.

### **Waste mineral oil**

30. Waste mineral oil is collected via tankers and delivered to site. The material is pumped via filters to settlement tanks which allows any water be decanted off.

Decanted water is then processed through the reactor tank or crush pits. The settlement tanks will be fitted with breather valves to allow air to vent during transfer and with varying temperature.

### **Pesticide treatment**

31. The site will accept a range of pesticide types. Pesticides that can be treated with alkaline hydrolysis (which excludes intractable pesticides) are processed in a dedicated treatment vessel within the main process building.
32. The process involves loading pesticides into an alkaline solution and mixed over a period of around 6 to 12 weeks (dependent upon the half-life of the pesticides). The pH of the batch solution will drop over time. The pH is measured and adjusted using caustic soda throughout the process to maintain an alkaline solution. Once the pH of the batch solution has stabilised (indicating that hydrolysis is complete) pH of the solution is measured to confirm it meets landfill acceptance criteria. The treated pesticide solution is then poured into double-line drums containing zeolite, the drums closed and sealed and disposed to landfill.

### **Road sweepings and hydro-excavation wastes**

33. Road sweepings and hydro-excavation wastes are settled in outdoor ponds to the north of the proposed process building. Once the solid material is dewatered it is sent to landfill. Liquid from the dewatering is directed to trade waste.

### **Tyre shedding**

34. WMNZ proposes to operate a tyre shredding plant at a location near the northern corner of the site. Waste tyres will be brought on site and stockpiled before being loaded into a hopper that feeds the shredding plant. The plant operates via a two-stage shredding process; the first stage producing a coarse chip product and the second stage producing a smaller chip product.
35. Water is sprayed onto the blades to help keep the blades cool and assist with the cutting. These water sprays will help to control any dust generated by the process to negligible levels. The final chipped product is loaded into shipping containers to be sent off-site for end use.

### **Other wastes**

36. A range of other waste products will be brought to the site and consolidated and stored before being moved to another location (they will not be treated onsite), types of wastes include: Cyanide, Chlorinated Solvents, Solvents, Intractable pesticides, Medical (Cytotoxic).

### **Management Plan**

37. In addition to the above, the applicant has included an Environmental Management Plan (EMP) from their Bromley site which they will adapt for the proposed site in Hornby (Appendix H).
38. The EMP will include information on the source and nature of emissions to air from the site, requirements for emissions monitoring, key procedures for the operation,

maintenance and monitoring of the biofilter and wet scrubber. More detailed procedures for treatment processes and maintenance and monitoring of emission control equipment are kept on site in the form of work instructions.

## LEGAL AND PLANNING MATTERS

### The Resource Management Act 1991 (RMA)

39. Section 15(1)(c) of the RMA states that no person may discharge contaminants from any industrial or trade premises into air unless the discharge is expressly allowed by a rule in a regional plan and proposed plan, or it is expressly allowed by a resource consent.
40. Section 15(2) of the RMA states that no person may discharge contaminants into the air, or into or onto land, from a place or any other source, whether moveable or not, in a manner that contravenes a national environmental standard unless the discharge is expressly allowed by a resource consent, other regulations or is an activity allowed by section 20A.
41. Section 15(2A) of the RMA states that no person may discharge a contaminant into the air, or into or onto land, from a place or any other source, whether moveable or not, in a manner that contravenes a regional rule unless the discharge unless the discharge is expressly allowed by a resource consent, other regulations or is an activity allowed by section 20A.

### National Environmental Standards (NES) for Air Quality

42. On 1 September 2005 Resource Management (National Environmental Standards for Air Quality) Regulations 2004 (NESAQ) regulations came into effect. Subsequently, amendments to these regulations were passed on 18 April 2011. These came into force on 1 June 2011 (although some regulations did not apply until 1 September 2012).
43. The 2005 Regulations with the 2011 Amendments are operative The NES address emissions into air of five contaminants. Only emissions of particulate matter, PM<sub>10</sub>, are relevant to the proposed activity.
44. Regulation 17(1) and (2)(a) states:  
*“(1) A consent authority must decline an application for a resource consent ... to discharge PM10 if the discharge to be expressly allowed by the consent would be likely, at any time, to increase the concentration of PM10 (calculated as a 24 hour mean under Schedule 1 by more than 2.5 micrograms per cubic metre in any part of a polluted airshed other than on the site on which the consent would be exercised.”*
45. The proposed site is situated approximately 200 m south of the Christchurch Airshed, Furthermore, there are no appreciable discharges of PM<sub>10</sub> from the proposed activity. Accordingly, Regulation 17 is not applicable in this instance and there are no restrictions to granting consent under this regulation.
46. Furthermore, given the type of discharge and location of the activity, I consider that the discharge of contaminants (namely odour), carried out in compliance with relevant consent conditions will not cause an exceedance of any of the ambient air quality standards set out in Schedule 1 of the NESAQ.

### Canterbury Air Regional Plan (CARP)

47. The discharge of contaminants to air from a hazardous waste treatment facility is not specifically provided for by the rules relating to waste management activities or activities undertaken on an industrial or trade premises in the CARP.
48. The most relevant rule for the proposed discharge is **Rule 7.63.2**:  
*The discharge of contaminants into air: that is from an industrial or trade premise and is not managed by Rules 7.47 -7.62; and is not a prohibited activity, is a discretionary activity.*
49. As no rule covers the operation and discharge of a hazardous waste treatment facility and this activity is not listed as a prohibited activity, it is classed as a **discretionary activity** under **Rule 7.63**.
50. The applicant has assessed the following permitted activities rules for air discharges, and found their discharge activities to be compliant with all the conditions of these rules:  
**Rule 7.62:** *The discharge of contaminants into air from the ventilation of buildings located on industrial or trade premises, where that discharge is not via forced extraction to an emission stack or treatment system.*  
**Rule 7.60:** *The discharge of contaminants into air from laboratory fume cupboards*
51. I regard the applicant's assessment of **Rule 7.60** to be correct, however I disagree with their assessment of **Rule 7.62** condition (1) which states "*the discharge does not cause an offensive or objectionable effect beyond the boundary of the property of origin.*"
52. The assessment of environmental effects undertaken in this report has found that the sites discharges to air (from the buildings ventilation system) may result in an offensive or objectionable odour beyond the boundary of the property, and so this condition cannot be met. As this rule cannot be complied, this discharge falls under **Rule 7.63.2** and is classed as a **discretionary activity**.
53. In summary, the proposed operation of a hazardous waste treatment facility and associated discharges to air from ventilation of buildings, is classed **discretionary activity**.
54. The discharge of contaminants into air from laboratory fume cupboards is a **Permitted Activity** under Rule 7.60.

## DESCRIPTION OF THE AFFECTED ENVIRONMENT

55. A detailed description of the site and surrounding environment can be found in Section 3 (Pages 9) of the AEE. In summary, I note the following:
- The site is located within an "Industrial Heavy" zone and "Sir James Wattie Drive Outline Development Plan" area of the Christchurch District Plan (CDP), and is 50m north from the Selwyn District Council boundary.
  - Land to the east of the site is zoned Rural Urban Fringe (RuUF) of the CDP.
  - The site is located within the Ōtautahi Clean Air Zone and just outside of the perimeter of the Christchurch Airshed.



- d. The Hornby railway (siding) runs along the eastern boundary of the site. The Christchurch Southern Motorway Stage 2 (CSM2) construction is ongoing along the northern boundary of the site.
- e. The area north of the site across the CSM2 corridor is characterised by engineering and manufacturing activities including: John Jones Steel, Brown Brothers Engineers, Sleepyhead Manufacturing and Fletcher Easysteel.
- f. Land to the east and south of the site is used for farming activities and residential dwellings.
- g. Bordering the site to the west is an existing transfer station facility owned by the applicant, this site does not hold any consents from CRC.
- h. Eight residential properties and two commercial/ retail are located within 500m of the site, these are located to the south and east.
- i. The site is generally flat and consists of existing buildings.
- j. The site falls within the rohe of Tūāhuriri Rūnanga;
- k. There are no Statutory Acknowledgement Areas, Rūnanga Sensitive Sites or Silent Files within 1000 metres of the site.
- l. The nearest NZAA site is located 330m north of the site.

*Wind and Air Quality*

- g. The applicant has supplied wind data from Christchurch airport which is located 8km north from the site, the data was used within the air dispersion modelling.
- h. The wind rose from this data is shown below in Figure 3, in summary:
  - i. Predominant winds are from the north-east quarter; and
  - ii. Secondary prevalence from the south-west quadrant;

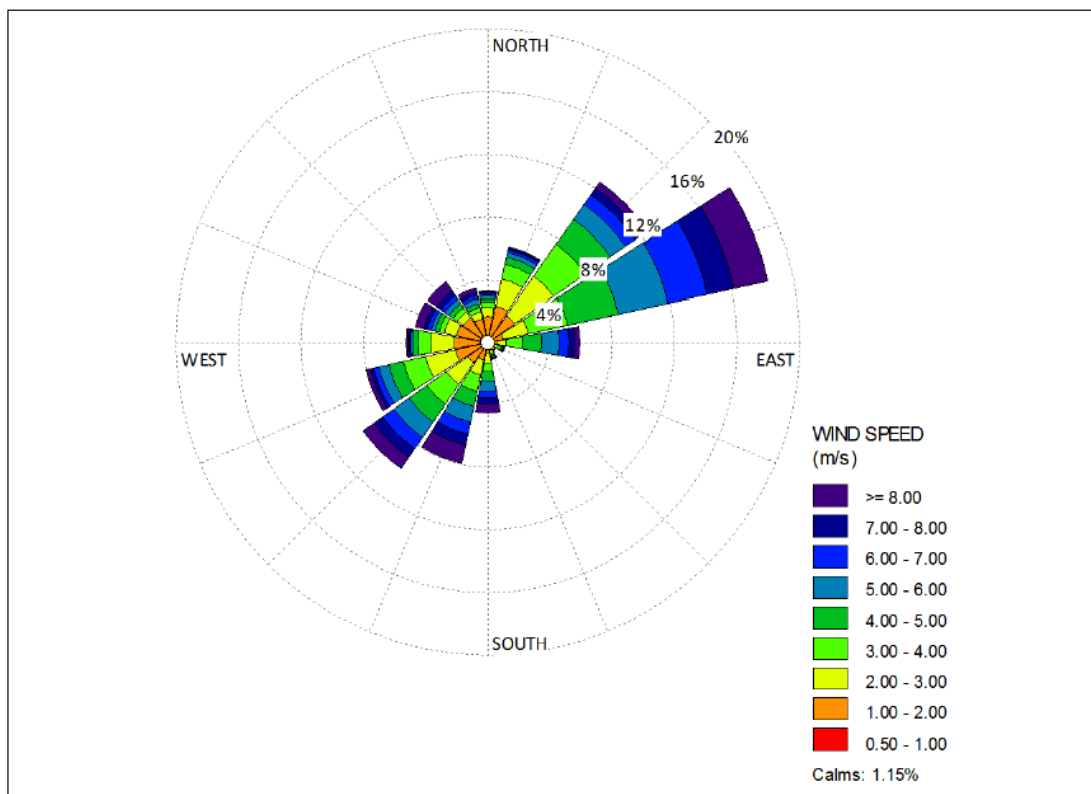


Figure 3.2: Frequency distribution of wind speed and direction measurements, Christchurch Airport, 2007 to 2011 inclusive) (1-hour average wind data (m/s); winds blowing-from).

Figure 2: Windrose for the Site

## ASSESSMENT OF ACTUAL AND POTENTIAL EFFECTS

56. I consider the following potential effect to be relevant to this proposal:
  - a. Actual and potential adverse effects of odour.
  - b. Actual and potential adverse effects of human health.
  - c. Actual and potential adverse effects from discharge of dust.
57. The Canterbury Regional Council (CRC) engaged Donovan Van Kekem from NZAIR to undertake a technical review of the applicant's Assessment of Odour Effects. His report can be reviewed at C19C/64718.
58. Following the technical review of the assessment and the points of concern raised within the assessment, the applicant provided the following additional information to support the assessment:
  - a. s92 reply on 12 July 2019 (C19C/115756)
  - b. Further s92 reply on 18 October 2019 (C19C/168380)
59. These submissions of further information were then reviewed by Mr Van Kekem who provided a second technical review which can be reviewed at C19C/171261.

### Potential adverse effects of the discharge on odour

60. Several waste materials stored or treated at the site have the potential to give rise to odour which may potentially adversely affect amenity values or cause nuisance effects.

Odour sources

61. The applicant has stated that the main odour generating activity will be the organic waste processing plant, with heavy metal solution waste treatment process also potentially producing a less significant odour. All other waste management process is unlikely to produce a significant odour according to the applicant.
62. The organic waste processing involves a wide range of waste produces ranging including septic tanks, cesspits, grease traps (food manufacture, restaurants etc.), latex, wine industry, sugar and dairy wastes. There is a potential for odorous gases to be emitted from the organics wastes treatment process, most notably the mix tank, holding tanks, belt press and solid waste storage areas.
63. Waste metal solutions to be treated on site will include wastes from electroplating operations, galvanising and timber treatment processes. The potential discharges to air from this process are inorganic gases such as sulphur dioxide, ammonia, chlorine or hydrogen sulphide.
64. The proposed site will operate from 5am to 8pm, Monday to Saturday and so the discharge of odour to air could occur at anytime during these hours.

Receiving environment

65. The site is located within a heavy industrial zone the CDP and Ōtautahi Clean Air Zone and just outside of the perimeter of the Christchurch Airshed.
66. 10 discharge to air consents are located within 1km of the site, these discharges cover a wide range of activities including; spray painting, manufacturing, food production, hazardous waste.
67. While the site is located within an industrial zone, much of surrounding land is used for farming or rural housing as show in the photo below:



**Figure 1: Aerial Image of Applicant's Site**

68. The closet “*highly sensitive receptors*” as defined by MfE *Good Practice Guide for Assessing and Managing Odour* located within 500m of the site have been identified as:
- a. Residential dwelling at 328 Marshs Road, 110m south east.
  - b. Residential dwelling at 312 Marshs Road, 105m south.
  - c. Residential dwelling at 298 Marshs Road, 90m south west.
  - d. Residential dwelling at 318 Springs Road, 310m east.
  - e. Residential dwelling at 270 Marshs Road, 100m south west.
  - f. Residential dwelling at 322 Marshs Road, 260m south.
  - g. Commercial and retail store (*Texture Plants*) 315 Marshs Road, 70m south east.
  - h. Residential dwelling at 383 Springs Road, 460m east.
  - i. Commercial and retail store (*Slice of Spring*) 407 Spring Road, 470m east.
  - j. Residential dwelling at 4/82 Blakes Road, 480m south west.
69. The majority of these sensitive receptors are located to the south of the site, this is likely due to land to the west and north been zoned and used for industrial activities.
70. The township of Prebbleton is located approximately 700m south of the site.
71. Based on wind data collected from Christchurch airport the predominant winds are from the north-east quarter; with secondary prevalence from the south-west quadrant.

#### FIDOL Assessment

72. As part of their AEE the applicant has undertaken a FIDOL assessment which can be viewed at page 20, C19C/44871. A summary of this FIDOL assessment is provided below:
- a. *Low wind speeds rather than high wind speeds are more likely to result in nearby receptors being impacted by odour. Light winds are most common in late evening and early morning, when very little waste is processed. High winds are more likely during the day when most of the waste is processed, these winds will help to disperse any odour. The highly sensitive residential locations to the south will be the most exposed from the site’s odour dischargers.*
  - b. *The intensity of odour emissions will be a function the waste being treated, the scale and method of treatment and management and mitigation measures implemented. The majority of odorous activities on site will be undertaken indoors within the main processing building. Air from the most odorous of these processes (organics dewatering and mix tanks) will be extracted and treated via a biofilter. The headspace from the heavy metals solution waste mix tank will also be extracted to a scrubber prior to discharging.*
  - c. *Due to the nature of the material handled at the site, the odour character can have an unpleasant hedonic tone. The nature and character of potential odour from the site is variable and will depend upon the process. These may include odours associated with the degradation of organic material and hydrogen sulphide odour associated with the treatment of some heavy metal waste.*

- d. *As noted above, activities to the north of the site generally have a low to moderate sensitivity to potential odour impacts, whereas those to the south and east have a moderate to high sensitivity.*

#### Review of odour complaints and history

73. Within there AEE the applicant states that one means of showing that the proposed site will not result in odours effects beyond the boundary of the site, is via examining the CRC compliant register for their existing site at Bromley. An investigation of this register found only one complaint due to pesticide odour (PE175181) directly referencing Waste Management's Bromley site. According to the applicant, the lack of complaints made at their Bromley site shows that they can undertake waste processing activities which do not result in adverse odour effects on neighbouring sites.
74. MfE *Good Practice Guide for Assessing and Managing Odour* states recommends using odour complaint records as a means of assessing effects, however MfE also highlight the shortcomings of using complaint records e.g. different tolerance levels to odour and trouble identifying the source.
75. While CRC records do show only one reported odour complaints from the Bromley site, I do not regard this as an effective tool for measuring odour effects due to the following reasons:
- a. The Bromley site is in the middle of a heavy industrial zone with no residential or other sensitive receptors nearby and so the receiving environment is significantly different to the proposed site.
  - b. Several highly odorous activities (e.g. Living Earth Compost and the Wastewater Treatment Plant) occur nearby to the Bromley site. Given the Bromley site proximity to these sites, it would make it very difficult to prove if any odour was coming from the Bromley plant.
76. In summary, I do not regard the applicants overall positive compliance record for there Bromley site as proof that that their proposed Hornby site will not discharge odour beyond the boundary.

#### Mitigation and monitoring

77. The applicant has stated that the sites Site Management Plan will be based on the SMP used at their Bromley site and will be the primary document for managing the sites operations and associated monitoring and maintenance. No SMP was provided with the application.
78. A key aspect of minimising the sites odour will be the use of biofilter and managing the performance of biofilter (pressure drop, pH and moisture content of the bed media) to ensure it is operating correctly.
79. Monitoring from both treatment processes is carried out by taking a grab sample of the waste being treated and testing the pH of the solution. This occurs each day of operation or for each batch per day – whichever is the lesser frequency and adjustment to the pH made as necessary depending on the type of wastes being treated.

80. Daily odour observation checks around the site will be undertaken as well as the use of continuous H<sub>2</sub>S sensors to monitor occupational exposure in and around the crush pit.
81. The applicant has stated that they will undertake all but there least odours activities within the confines of their waste processing building and that the doors of this building will remain closed apart for when trucks are coming and going from the building.
82. The applicant has not provided any suggested conditions for monitoring the site aside from providing their current consent conditions for their Bromley site (C19C/44871-2 page 66).

Expert review of application by Donovan Van Kekem

83. Air quality consultant Mr Van Kekem of NZAIR Ltd was commissioned by CRC to provide technical advice regarding this application, his assessments and comments can be viewed at C19C/171261 and C19C/121853. Mr Van Kekem provided the following comments regarding the discharge of odour from the proposed Bromley site:
  - a. *From my site visit and a review of available aerial imagery, it appears that there are a number of sensitive receptors in close proximity to the site.*
  - b. *The application contends that the proposed facility will not result in off-site odour effects based on the lack of complaints which are recorded against the existing (Bromley) and previous operations. Both of these were/are located in heavy industrial zoned land where there is an expectation of lower amenity values. In comparison, the nearest receptors to this facility (Hornby) will have an expectation of a high degree of amenity (particularly given that the nearby industrial land has only recently been developed). Given the sensitivity of receiving environment in Hornby I consider that there is an elevated risk of off-site odour complaints. Therefore, I think that the 'no recorded odour complaints' has little weighting in the context of this assessment.*
  - c. *Furthermore, I am aware that the Waste Management facility in East Tamaki has been subject to complaints (as confirmed in personal communications with Auckland Council) despite also being in a heavy industrial zone without nearby sensitive receptors. Furthermore, a similar operation (ChemWaste in Onehunga) has also been subject to complaints despite being well separated from sensitive receptors. Both operations have enclosed their processes to reduce the potential for offsite effects and this has been effective in reducing complaints.*
  - d. *I am also aware that some of the waste streams received at the current and proposed facility will have a high potential to discharge nuisance odours (i.e. the organic wastes). During my site visit to the Bromley facility I observed highly odorous waste streams and processes.*
  - e. *In summary, hazardous waste transfer and processing plants of a similar nature and type as that proposed by the applicant have the potential to result in nuisance off-site odour effects even when appropriately located within a heavy industrial area with substantial separation distances from sensitive receptors. Therefore, in my opinion the proposed Hornby Waste Management facility has a high risk of off-site effects and will require very stringent controls to minimise this risk to an acceptable level.*

- f. *My observations of the operation at Bromley were that the applicant, in general, was undertaking good practice controls, and is seeking to improve the level of control over potential air discharges associated with the processes on-site. However, it is not possible to completely eliminate odour emissions from the site and therefore it is my opinion that there is a potential for off-site effects from an operation of this nature and scale.*
- g. *Overall, the applicant has provided a large amount of information in support of the application, this does not preclude the fact that the activity involves processing and handling a wide range of hazardous chemicals and mixtures. Some of these are very odorous. Whilst there are a range of controls proposed to minimise the emission of these toxic and odorous emissions, they will not be completely eliminated. There will be some residual emission. Given the proximity and sensitivity of the receiving environment, it is my opinion that the applicant will need to apply a very high level of control to potential emissions from the site. The activity needs to be limited to a manageable scale and size, such that the proposed controls will still be effective at the proposed scale. Redundancy measures for potential upset conditions are also recommended.*

84. Mr Van Kekem also provided the following information regarding suggested setback buffer distances from facilities similar to the proposal:

- a. 1,000 m for recycling, recovery, reuse or disposal: Hazardous materials storage or treatment - Auckland Regional Plan ALW (now replaced by the Auckland Unitary Plan).
- b. 500 m for a 'Prescribed industrial waste treatment facility' – EPA Victoria Publication 1518 (2013)
- c. 400 m Biosolids depot, 300 m other waste or recycling depots – EPA South Australia Guidelines for separation distances (2007)
- d. Used tyre recycling 500 – 1000 m – Western Australia EPA Separation Distances between Industrial and Sensitive Land Uses (2005) Note that the separation distance for industrial liquid waste disposal is 'case by case' in this guide.

### Summary

- 85. In summary, I find the applicant's assessment approach was undertaken in accordance with some of the Ministry of the Environment (MfE) Good Practice Guide for Assessing and Managing Odour (2016).
- 86. The applicant's main tool used within this assessment has been their FIDOL assessment and existing Bromley's sites apparent lack of odour complaints. We do not regard the complaints records an effective odour assessment tool given the many differences between the existing Bromley and proposed Hornby sites.
- 87. The applicant has stated within their FIDOL assessment:
  - a. *"Due to the nature of the material handled at the site, the odour character can have an unpleasant hedonic tone"*
  - b. *"activities to the north of the site generally have a low to moderate sensitivity to potential odour impacts, whereas those to the south and east have a moderate to high sensitivity".*
  - c. *"potential odour effects at these most impacted locations to the immediate south of the site are expected to be less than minor"*

88. Air quality consultant Mr Van Kekem has reviewed the applicant's assessment on CRC behalf, he generally agrees with the applicants first two comments above (a)(b) but appears to strongly disagree with the applicants view that odour effects beyond the site boundary will be less than minor, as shown in the quote below:
- a. *"Therefore, in my opinion the proposed Hornby Waste Management facility has a high risk of off-site effects and will require very stringent controls to minimise this risk to an acceptable level"*.
89. Mr Van Kekem view that there is a high risk of odour leaving the site is shared with numerous Australian and New Zealand planning guidelines for waste treatment facilities. These guidelines recommend a buffer distance of between 400-1000m waste treatment facilities from sensitive receptors such as dwellings due to the adverse effects caused by these facilities.
90. Considering the above, Mr Van Kekem reviewed and the recommended setback distances for waste treatment facilities, I consider that if the proposal is constructed in full and mitigation controls are used as proposed, there is still the potential for odour levels to be considered "offensive or objectionable" immediately beyond the boundary during some waste processing activities (e.g. organic waste). I consider that odour effects associated with these activities on persons owning or occupying or using sensitive receptors (e.g. dwellings) within 500m of proposed discharge would be considered minor. If outside of those thresholds, I consider the effects as less than minor.

### **Potential adverse effects of the discharge on human health**

#### Discharge

91. Several waste materials which the applicant wishes to process at the site have the potential to release toxic compounds to air which could impact human health.
92. Mr Van Kekem has highlighted the most high-risk products and processes as:
- a. Pesticide and herbicide treatment
  - b. Decanting of solvents
  - c. Heavy metal treatment
93. More information on these processes can be viewed within the "description of proposed activity" (page 2) section of this report.

#### Receiving environment

94. A detailed description of the surrounding environment can be viewed within the "receiving environment" (page 10) section of this report,

#### Expert review of application by Donovan Van Kekem

95. Having reviewed the AEE and s92 return (C19C/115756), Mr Van Kekem highlighted the following areas of concern regarding this application:
- a. the wide range of air pollutants which could be released;
  - b. the lack of any limits on the volume of products to be processed;
  - c. the lack of limits on how the products on-site will be treated; and  
the absence of any proposed monitoring to confirm that no hazardous pollutants



are being discharged from the site (other than H<sub>2</sub>S monitoring).

96. The applicant was requested to provide more information to address these above concerns, their response has been summarised below (full response can be viewed at C19C/171261):

#### **Decanting of solvents**

- a. *WMNZ has not needed to handle more than approximately 100 L per annum of chlorinated solvents in the past 12 months, indicating the very small scale of this activity.*
- b. *In terms of other solvents, WMNZ confirms that a typical month would, on average, consist of the handling of 2,500 L to 3,000 L (2.5 to 3 m<sup>3</sup>) of solvents, broken down as follows:*
  - *<1,000 L of used gun-wash/cleaning solvents, which are not decanted – they arrive in pails and are collected from site by a local supplier to refine and use (weekly collections).*
  - *<1,000 L of waste solvents decanted and consolidated for shipment to East Tamaki.*
  - *<1,000 L of oil/solvent based paints – decanted, with recovery of free solvent around 10-15%. These are consolidated and shipped to East Tamaki.*
- c. *Waste fuel/slops: this relates to specific project work or one-off jobs and are received via bulk tanker after which they are transferred into ISO containers for shipment to East Tamaki, or in ready to transport drums, which we consolidate for shipment.*
- d. *No processing, treatment or heating of solvents takes place, with activities limited to consolidation and decanting. As such, emissions to air from these activities will be negligible. The above indication of typical quantities is intended to provide an appreciation of the relative small scale of handling of solvents and is not intended as limit thresholds for consenting, as flexibility is required to be able to safely and securely receive and dispatch waste solvents from clients.*

#### **Heavy Metals**

- a. *Appendix B (C19C/115756) has been prepared by WMNZ and provides a further description of the heavy metal treatment process and summarises the reactions that take place. The reactions principally comprise precipitation/flocculation of metal solids, which is achieved through maintaining a high pH.*
- b. *In terms of the scale of the heavy metals plant, WMNZ confirms that heavy metal solutions, such as galvanising acid (zinc contaminated sulphuric acid), electroplating waste, are normally treated in batches of 5 to 10 m<sup>3</sup> at any time. On average, WMNZ process four batches per month.*

#### **Pesticide Plant**

- a. *With regard to the proposed treatment of the limited range of pesticides processed on-site, these will be treated in small batches of between 10 L and*

100 L, with on average one batch being processed per month, depending on the type class of pesticide. Further information from WMNZ describing the reactions associated with the pesticide treatment process are provided in Appendix B (C19C/115756).

97. The expected volumes of pesticides, heavy metal and solvents to be processed onsite are not particularly high for a commercial waste management site, however the applicant has not proposed any total limits for storing or processing these materials and so these suggested volumes could be significantly exceeded if no limits are set.
98. Mr Van Kekem final comments on the proposed management and processing of pesticides, heavy metal and solvents are listed below:

*My primary concerns relate to the applicant providing semi quantitative proof that the potential emissions of toxic compounds is minimal. I explained that a mass balance and chemical formulas would be helpful. From what I can see in the response they talk about processing batches of between 5 and 10 m<sup>3</sup>. It now appears that this will occur in a 'reaction tanks' as opposed to open pits, and that discharges to air will be 'vented to atmosphere' via the roof vents. I'd like to see some indicative design drawings for these 'reaction tanks' and associated ventilation scheme.*

*The mass of pesticide treatment on-site also does not propose to have a limit. I'm aware that the treatment facility will have a maximum processing capacity. I consider that a limit at this processing capacity be considered as a consent condition should it be granted. Furthermore, once again I'd like to see the chemical formulas which better describe the treatment processes for different pesticide solutions, such that it can be proven that under ideal conditions no gas is evolved from the process. Or if there is gas, that the relative mass emission rate of this gas (based on the maximum processing capacity of the processing plant) is low enough that the proposed carbon filter and discharge stack is sufficient control.*

*The proposed decanting of solvents appears to be a small scale operation with a low likelihood for off-site effects. However, I consider it would be appropriate to have some form of consent condition that limits the scale of this activity. The condition should be variable, i.e. limits of decanting operations of certain chemical classes shall be set in accordance with their toxicity.*

*The applicant has consented to having a consent condition that the main doors to the processing are remain closed except for the ingress and egress of trucks. This will help to reduce potential fugitive emissions from the processing area and ensure the any odour/emissions are discharged via the roof vents. Thus, reducing the potential for odour or toxic off-site concentrations.*

#### Mitigation and monitoring

99. The applicant has highlighted the following migration measures for reducing the risk to human health from the site:
- a. Processing of heavy metal will occur in a reaction tanks as opposed to open pits.
  - b. The discharges to air will be 'vented to atmosphere' via the roof vents.

- c. Pesticides and herbicides to be treated under alkali conditions to reduce gas generation and the use of an activated carbon filter to treat pesticide or odour emissions prior to discharge through the small stack.
  - d. No processing, treatment or heating of solvents will occur, with activities limited to consolidation and decanting.
  - e. Processing and decanting of materials will occur inside the facility with the doors closed.
  - f. An EMP will be used to manage the sites activities (e.g. operation, maintenance and monitoring of the biofilter and wet scrubber) and consent requirements.
  - g. Emissions monitoring will be undertaken.
100. It is worth noting that the applicant has not provided any detailed information on what kind of monitoring will occur apart from the monitoring of biofilter, they have also to date not provided an SMP for the site.

### Summary

101. The applicant's proposed processing of hazardous goods has the potential to release harmful contaminants to air that can adversely impact human health.
102. The proposed site although located in an Industrial zone, has ten sensitive receptors including dwellings and retail sites located to the south and east within 500m of the site. Given the proximity of these receptors to the site and the potential harmful nature of the discharges, I regard the receiving environment to the south and east of the site to be highly sensitive.
103. While the applicant has provided information on the type and amount of waste which will be processed, and the mitigation measures which will be used to reduce the risks posed by this waste, they have not provided enough information to address all matters of concern regarding this activity. I regard the following information is still required to fully understand the risks posed by the discharge:
- a. A quantitative assessment for emissions of toxic compounds from the site.
  - b. Further information regarding treatment processes of pesticide solutions.
  - c. Limits on the amount of solvents to be decanted onsite based on there toxicity.
  - d. Limits on the amount of pesticides to be processed onsite.
  - e. A SMP and detailed monitoring programme.
104. Based on the information provided to date by the applicant, advice provided by Mr Van Kekem with numerous Australian and New Zealand planning guidelines for waste treatment facilities, I regard the purposed discharges to air could potentially result in adverse effects on human health beyond the boundary of the site. I consider that effects associated with these activities on persons owning or occupying or using sensitive receptors (e.g. dwellings) within 500m of proposed discharge would be considered minor. If outside of those thresholds, I consider the effects as less than minor.

### **Actual and potential adverse effects from dust**

#### Discharge

105. The operation of a waste management facility can result in the production and discharge of dust, if this dust is discharge beyond the site it can result significant annoyance effects on neighbouring sites.
106. The applicant has stated that several its waste treatment processes are inherently dusty, these include tyre chipping plant, road sweepings and hydro-excavation wastes. The movement of vehicles onsite is also potentially source of dust.

### Mitigation and monitoring

107. Applicant will undertake the majority of their waste management activities inside their main building with doors closed, the site road is also sealed so no dust will be generated from vehicle movements.
108. Some waste treatment processes (tyre chipping plant, road sweepings and hydro-excavation wastes) will occur outside the main building and so are at a high risk of causing a discharge of dust beyond the site.
109. The applicant plans to mitigate these risks through the use of water sprays to keep material damp and locating these activities to the north of the site and so away from the sensitive receptors to the south.

### FIDOL assessment

110. The applicant has provided a FIDOL assessment for dust within their AEE (C19C/44871-2, page 27), in summary it states:
  - a. Dust discharge offsite is likely to be most serious during dry windy periods, in this area such windy periods generally come from the east and northeast, these windy events (>7m/s) are expected to occur 4-5% of the time. The closest dwelling down wind of site during such events is 298 Marsh's Road, which is 160m from the site.
  - b. Frequency and duration of dust impacts are not expected to be high given the tyre shredder will only occur for a short period of time, road sweepings and hydro-excavation wastes is expected to be kept damp during the drying process to prevent the discharge of dust.
  - c. The intensity of any dust impacts is expected to be very low and dust emissions that do occur should be readily able to be controlled.
  - d. Potential dust has the potential to contain contaminated material and therefore has a moderate to high degree of offensiveness.
  - e. Locations to the north of the site are comprised of the Southern Motorway (currently being constructed) and industrial activities beyond that which have a low to moderate sensitivity to dust impacts.
  - f. The potential for dust nuisance is considered to be very low, principally due to the very low intensity of impacts expected.

111. Mr Van Kekem has reviewed the applicant's FIDOL assessment and stated:

*With regard to dust emissions we have agreed that the proposed on-site controls are sufficient as most of the material remains damp during transfer and disturbance activities. Whilst this dust could contain toxic components, adequate controls will reduce the potential for off-site effects.*

### Summary

112. Having reviewed the applicant's FIDOL assessment, I generally agree that while the site has the potential to release dust which could be regarded as an offence by neighbouring downwind sites, the risk of this happening is generally low if the proposed mitigation measures are followed and the dust-generating activities (e.g. tyre shredding) occur at a low frequency.
113. Considering the above and Mr Van Kekem's review, I consider that the proposed activities can be undertaken at the site without resulting in "offensive or objectionable" discharge of dust beyond the site boundary, if all mitigation measures are met, I

consider that any adverse effects from the sites discharge of dust will likely be less than minor.

### **Actual and potential adverse effects on Tangata Whenua values**

114. The proposed site is located within the rohe of Tūāhuriri Rūnanga, a copy of the application was sent by CRC to the Tūāhuriri Rūnanga with an opportunity to comment of the application, at the time of writing this report, no response has been received.
115. There are no Statutory Acknowledgement Areas, Rūnanga Sensitive Sites or Silent Files within 1000 metres of the site.
116. I have therefore taken into consideration each of the Policies and Objectives of the relevant Iwi Management Plans (IMP) within the area.
117. The Mahaanui Iwi Management Plan (2013) (IMP) states that a discharge of contaminants to air can have adverse effects on Ngāi Tahu values such as mauri, mahinga kai, wāhi tapu, wāhi taonga and marae, and the health of our people and communities.
118. Policies R1.1 to R1.4 (Page 70) of the IMP relate to the discharge of contaminants to air. The one policy of relevance to this application is:
  - c. R1.1: To protect the mauri of air from adverse effects associated with discharge to air activities.
119. As discussed above, I only consider that the potential for adverse effects from the proposed discharge to air are limited to sensitive sites within 500m of the discharge, I do no regards there to be any significant effects on air quality beyond this setback.
120. Therefore, I consider the application is not contrary to the relevant objectives and policies of the Mahaanui Iwi Management Plan (2013).

### **INTERESTED PARTIES**

121. I note that as part of the application process, Canterbury Regional Council (CRC) advised the following parties of the application;
  - d. Christchurch City Council;
  - e. Selwyn District Council
  - f. Ngai Tūāhuriri Rūnanga;
  - g. Fish and Game North;
  - h. Forest and Bird; and
  - i. Canterbury District Health board
122. These parties were asked to respond by the 1 April 2019, as of November 2019 no responses had been returned regarding this application.

### **ASSESSMENT OF AFFECTED PERSONS**

123. As discussed above, I consider that the potential odour generated from the proposed waste management facility has the potential to be considered “offensive or objectionable” immediately beyond the boundary at some locations, if a sensitive receptor is located within that area. I also note that there remains some uncertainty

regarding the potential health effects from the discharge which could also impact sensitive receptors.

124. Several planning guidelines are available which propose setback distances between waste management facilities and sensitive receptors. These setback distances range between 300 – 1000m and can be viewed in paragraph 83 of this report.
125. Having reviewed those guidelines, I regard the EPA Victoria 500m recommended setback distances as the most suitable for this site given it has a specific setback for a “*Prescribed industrial waste treatment facility*” which is the kind of facility proposed to operate onsite.
126. I note that Auckland Unitary Plan recommends up to 1km separation distance for Hazardous materials storage or treatment, I recommend this 1km separation distance is likely unnecessary given the mitigation measures proposed by the applicant to minimise adverse effects. If the majority of waste processes were to occur outside then the 1km separation distance would be suitable, but since these will occur indoors and treated and discharged via a biofilter and ventilation system I regard 500m as a sufficient limit.
127. “Sensitive receptors” have been defined as sites with a “high rating” using MfE *Good Practice Guide for Assessing and Managing Odour; Table 4*. Sites within 500m of the site which fall into this “high rating” include: rural residential and commercial and retail. These sites are all located to the south and east of the site and are zoned as “Inner Plains” under the Selwyn District Plan or “Rural Urban Fringe” under the Christchurch District Plan. No sensitive receptors are located to the west or north of the site most likely due to this land being zoned as “heavy industry” in the Christchurch District Plan.
128. There are 10 properties found to be sensitive receptors within 500m of the site, I have listed each of these below.
  - a. Johnston Leonard Bruce (owner/occupier), residential dwelling at 328 Marshs Road, 110m south east.
  - b. Mao Rutian Mao Xinjin (owner/occupier), residential dwelling at 312 Marshs Road, 105m south.
  - c. Pau Ngie Su, Wong Ek Ping, Ling LH, Teo SS Ting Tie Hau, Teng Tung Kiaw, Hung Ku (owner/occupier), residential dwelling at 298 Marshs Road, 90m south west.
  - d. Van Koppen Petronella Maria (owner/occupier), residential dwelling at 318 Springs Road, 310m east.
  - e. Peters Michael Stuart Peters Anne Felicia (owner/occupier), residential dwelling at 270 Marshs Road, 100m south west.
  - f. Prebble Hamish David & Emily Jane Stopforth Michael William (owner/occupier), residential dwelling at 322 Marshs Road, 260m south.
  - g. Texture Plants Garden Centre (owner/occupier), commercial and retail store 315 Marshs Road, 70m south east.
  - h. Packman Holdings Limited (owner/occupier), residential dwelling at 383 Springs Road, 460m east.
  - i. Slice of Springs Limited (owner/occupier), commercial and retail store 407 Spring Road, 470m east.
  - j. Chandru Ramamurthy Chandru Suganthi (owner/occupier) residential dwelling at 4/82 Blakes Road, 480m south west.

129. As all these sites are within the 500m separation distance area and have been classed as “sensitive receptors” there is the potential that they will suffer from minor odour effects and potential health effects resulting from the operation of the proposed waste management facility, and so should be regarded as affected parties in accordance with 95E of the RMA.
130. Discussions between Mr Van Kekem and Mr Chilton regarding a suggested setback distance between the site and sensitive receptors, found that a 500m setback was likely suitable for this site and surrounding environment.
131. I note that the applicant has undertaken discussions with owners and occupiers of sites listed above within the 500m to the site, however as of 11/11/2019, the applicant has yet to provide CRC with any written approvals.

## **OBJECTIVES AND POLICIES**

### **National Policy Statement (NPS)**

132. Section 104(1)(b)(iii) of the RMA states that the consent authority shall have regard to the relevant provisions of a National Policy Statement.
133. There are no national policy statements that are relevant to the discharge of contaminants to air associated with this consent application.

### **National Environmental Standards**

134. As mentioned earlier in the Legal and Planning Section, the threshold values for the national environmental standards for air quality (NESAQ) are not likely to be exceeded and therefore do not need to be further considered.

### **Regional Policy Statement (RPS)**

135. Under Section 104(1)(b)(v) of the RMA, the consent authority shall have regard to the relevant provisions of a regional policy statement. The Canterbury Regional Policy Statement became operative on 15 January 2013.

### **Chapter 14 – Air Quality**

- Objective 14.2.2 *Localised adverse effects of discharges on air quality*
- Policy 14.3.3 *Avoid, remedy or mitigate localised adverse effects on air quality*
- Policy 14.3.5 *Relationship between discharges to air and sensitive land-uses*

*New activities which require resource consents to discharge contaminants into air are to locate away from sensitive land uses and receiving environments unless adverse effects of the discharge can be avoided or mitigated.*

### **Chapter 19 - Waste Minimisation and Management**

- 19.3.1 *Waste management hierarchy -To apply the principles of the 5Rs (Reduce, Reuse, Recycle, Recover, Residual waste management) hierarchy to*

*the management of all waste streams.*

136. The applicant intends to operate a waste processing station within proximity to sensitive land uses. The adverse effects of the proposal in its current state have been appropriately avoided or mitigated and there will likely be a minor adverse effect if the mitigation measures are implemented. Therefore, the proposal is consistent with the relevant objectives and policies of Chapter 14 and 19 of the RPS.

### **Canterbury Air Regional Plan (CARP)**

137. The following objectives and policies of the CARP are considered relevant the consent application:
- **Objective 5.1** *Air quality protects the mauri and life supporting capacity of the environment.*
  - **Objective 5.2** *Ambient air quality provides for the health and wellbeing of the people of Canterbury.*
  - **Objective 5.4** *Degraded ambient air quality is improved over time and where ambient air quality is acceptable it is maintained.*
  - **Objective 5.5** *Air quality is managed in a way that provides for the cultural values and traditions of Ngāi Tahu.*
  - **Objective 5.7** *Discharges from new activities are appropriately located to take account of adjacent land uses and sensitive activities.*
  - **Objective 5.9** *Offensive and objectionable effects and noxious or dangerous effects on the environment are generally avoided.*
  - **Policy 6.1** *Discharges of contaminants into air, either individually or in combination with other discharges, do not cause:*
    - i. diverse effects on human health and wellbeing; or*
    - ii. adverse effects on the mauri and life supporting capacity of ecosystems, plants or animals; or*
    - iii. significantly diminished visibility; or*
    - iv. significant soiling or corrosion of structures or property.*
  - **Policy 6.2** *Recognise the value of air quality as a taonga to Tangata Whenua and manage adverse effects of discharges into air on wāhi tapu, wāhi taonga, and places of significance to Ngāi Tahu.*
  - **Policy 6.6** *Maintain ambient air quality in locations where the quality is acceptable when assessed against an ambient air quality standard set in a national ambient air quality standard or guideline.*
  - **Policy 6.9** *Discharges into air from new activities are appropriately located and adequately separated from sensitive activities, taking into account land use anticipated by a proposed or operative district plan and the sensitivity of the receiving environment.*
  - **Policy 6.13** *Minimise the cumulative effects of discharges of contaminants into air by requiring:*
    - i. permitted discharges to apply good environmental practices; and*
    - ii. discharges allowed by a resource consent to apply the best practicable option.*
  - **Policy 6.17** *Where a discharge causes effects that are unpredictable because of scientific uncertainty or an absence of information adopt a precautionary approach to assessing the effects if there is a risk of high probability or high potential impact.*



138. I consider the application is generally consistent with Objectives 5.1, 5.2, 5.5, 5.7, 5.9 and Policies 6.1, 6.2, 6.6, 6.9, 6.13 and 6.17 of the CARP.

This report states that the proposed discharge to air will result in minor odour effects and potentially minor human health effects, these effects can likely be further reduced with conditions and best practice management. Any adverse effects on air quality will be limited to neighbouring sites and so the effect on the mauri and life supporting capacity of the environment will be minimal.

The proposed site is located within a “heavy industrial” zone and beside an existing waste management plant, and so in my opinion is located in a suitable location. Sensitive receptors are located nearby the site and they may suffer from minor effects from the discharge and so this consent is recommended to be limited notified to these parties.

The proposed discharge will not impact visibility or result in soiling or corrosion of structures or property. I consider that it is unlikely that the proposal would contribute to an exceedance of ambient air quality guidelines or standards for PM<sub>10</sub>. As mentioned earlier in this report, the effect of the air discharge on Ngāi Tahu and Tangata Whenua values is likely to be minimal.


Currently there is some uncertainty regarding the potential health effects from the discharge, for this reason a precautionary approach has been used to assess the potential impact of the discharge. I am confident that with further information this risk will be better understood and a more robust assessment can be made.

In summary the proposed discharge is not contrary to the policies and objects of the CARP.

## RECOMMENDATION


139. Section 95A of the RMA 1991 specifies the steps the Council is to follow to determine whether an application is to be publicly notified. These steps are addressed in the statutory order below in accordance with s95A RMA 1991 in the attached ‘s42A Addendum’, Appendix 1:
- j. Step One: Mandatory public notification is not required (s95A(2) RMA 1991);
  - k. Step Two: Public notification is not precluded (s95A(4) RMA 1991);
  - l. Step Three: Public notification is not required in certain circumstances (s95A(7) RMA 1991); and
  - m. Step Four: Special circumstances do not exist which require the application to be publicly notified (s95A(9) RMA 1991).
140. As discussed in the assessment of effects above, adverse effects outside of the thresholds discussed above are likely to be less than minor. In addition, the applicant has not requested public notification, I am not aware of a rule or national environmental standards which require the application to be publicly notified nor has the applicant failed to provide information requested under section 92(1).
141. I therefore do not consider that public notification is required for this proposal.
142. If the application is not publicly notified under section 95A RMA 1991, the Council must follow the steps set out in section 95B to determine whether to limited notify the application. These steps are addressed below in statutory order in accordance with s95B RMA 1991 in the attached ‘s42A Addendum’:

- n. Step One: There are no protected customary rights groups or customary marine title groups affected by the proposed activity (s95B(2) RMA 1991). The proposed activity is not on or adjacent to, or may affect, land that is subject of a statutory acknowledgement under schedule 11 (s95B(3) RMA 1991);
  - o. Step Two: Limited notification is not precluded (s95B(5) RMA 1991);
  - p. Step Three: There are no affected persons in accordance with s95B(7) and (8) of the RMA 1991;
  - q. Step Four: Special circumstances do not exist which require the application to be limited notified (section 95B(10) RMA 1991).
143. In accordance with Section 95B, I consider that owners and occupiers listed in paragraph (127) of this report may be adversely affected by the proposed discharge as the potential adverse effects from the discharge to air are considered to be minor but not more than minor.
144. I therefore recommend limited notification of the application to all of these owners and occupiers.

Signed:  Date: 11/11/2019

Name: Joe Harrison  
Consents Planner

Reviewed by

Signed:  Date: 12/11/2019

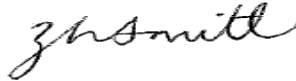
Name: Deepani Seneviratna  
Team Leader Consents Planning

## NOTIFICATION DECISION

We have considered all the relevant information, including the consent application, the expert opinion provided, and the memo prepared by the Consents Planning Officer. We agree with the Consents Planning Officer that the potential odour effects on neighbouring properties are minor. We consider that ALL owners and occupiers within a 500m radius of the subject property are potentially affected parties.

In summary, having considered s95A to 95E of the RMA, and under the authority delegated to us by Council, we agree that:

- The activity is unlikely to have effects on the environment that are more than minor and public notification of the application is not required under s95A.
- The application should be limit notified to property owners and occupiers within a 500m radius due to minor odour effects.



Signed:  
Name: Zella Smith, Principal Consent Planner

Date: 13/11/2019



Signed:  
Name: Paul Hopwood, Principal Consents Advisor

Date: 13/11/2019

## S42A Addendum – Appendix 1

<p>95A Public notification of consent applications</p> <p><i>(1) A consent authority must follow the steps set out in this section, in the order given, to determine whether to publicly notify an application for a resource consent.</i></p>	<p>Determination of whether to publicly notify an application for resource consent.</p>
<p><i>Step 1: mandatory public notification in certain circumstances</i></p> <p><i>(2) Determine whether the application meets any of the criteria set out in subsection (3) and,—</i></p> <p style="padding-left: 40px;"><i>(a) if the answer is yes, publicly notify the application; and</i></p> <p style="padding-left: 40px;"><i>(b) if the answer is no, go to step 2.</i></p> <p><i>(3) The criteria for step 1 are as follows:</i></p> <p style="padding-left: 40px;"><i>(a) the applicant has requested that the application be publicly notified:</i></p> <p style="padding-left: 40px;"><i>(b) public notification is required under <a href="#">section 95C</a>:</i></p> <p style="padding-left: 40px;"><i>(c) the application is made jointly with an application to exchange recreation reserve land under <a href="#">section 15AA</a> of the Reserves Act 1977.</i></p>	<p>Is public notification mandatory?</p> <p><input type="checkbox"/> Yes, publicly notify the application</p> <p><input checked="" type="checkbox"/> No, got to step 2</p>
<p><i>Step 2: if not required by step 1, public notification precluded in certain circumstances</i></p> <p><i>(4) Determine whether the application meets either of the criteria set out in subsection (5) and,—</i></p> <p style="padding-left: 40px;"><i>(a) if the answer is yes, go to step 4 (step 3 does not apply); and</i></p> <p style="padding-left: 40px;"><i>(b) if the answer is no, go to step 3.</i></p> <p><i>(5) The criteria for step 2 are as follows:</i></p> <p style="padding-left: 40px;"><i>(a) the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes public notification:</i></p>	<p>Is the activity a residential activity?</p> <p>1. Activity requires consent under a regional or district plan and is associated with the construction, alteration, or use of dwelling house/s:</p> <p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No</p> <p>2. Activity is within land intended to be used for residential purposes:</p>

<p><i>(b) the application is for a resource consent for 1 or more of the following, but no other, activities:</i></p> <p><i>(i) a controlled activity:</i></p> <p><i>(ii) a restricted discretionary or discretionary activity, but only if the activity is a subdivision of land or a residential activity:</i></p> <p><i>(iii) a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity:</i></p> <p><i>(iv) a prescribed activity (see <a href="#">section 360H(1)(a)(i)</a>).</i></p> <p><i>(6) In subsection (5), residential activity means an activity that requires resource consent under a regional or district plan and that is associated with the construction, alteration, or use of 1 or more dwellinghouses on land that, under a district plan, is intended to be used solely or principally for residential purposes.</i></p>	<p><input type="checkbox"/> Yes (Residential, Rural Residential)</p> <p><input checked="" type="checkbox"/> No (Business, Conservation, Cultural, Open Space, Rural, Special Purpose)</p> <p>3. Activity is a residential activity.</p> <p><input type="checkbox"/> Yes (Answers to 1 and 2 above are yes.)</p> <p><input checked="" type="checkbox"/> No (Answers to one or both above was no.)</p> <p>Is public notification precluded?</p> <p><input type="checkbox"/> Yes, go to step 4 (step 3 does not apply)</p> <p><input checked="" type="checkbox"/> No, go to step 3</p>
<p><i>Step 3: if not precluded by step 2, public notification required in certain circumstances</i></p> <p><i>(7) Determine whether the application meets either of the criteria set out in subsection (8) and,—</i></p> <p><i>(a) if the answer is yes, publicly notify the application; and</i></p> <p><i>(b) if the answer is no, go to step 4.</i></p> <p><i>(8) The criteria for step 3 are as follows:</i></p> <p><i>(a) the application is for a resource consent for 1 or more activities, and any of those activities is subject to a rule or national environmental standard that requires public notification:</i></p> <p><i>(b) the consent authority decides, in accordance with <a href="#">section 95D</a>, that the activity will have or is likely to have adverse effects on the</i></p>	<p>Is public notification required in certain circumstances?</p> <p><input type="checkbox"/> Yes, publicly notify the application</p> <p><input checked="" type="checkbox"/> No, go to step 4</p>

<p><i>environment that are more than minor.</i></p>	
<p><i>Step 4: public notification in special circumstances</i></p> <p><i>(9) Determine whether special circumstances exist in relation to the application that warrant the application being publicly notified and,—</i></p> <p><i>(a) if the answer is yes, publicly notify the application; and</i></p> <p><i>(b) if the answer is no, do not publicly notify the application, but determine whether to give limited notification of the application under <a href="#">section 95B</a>.</i></p>	<p>Do special circumstances exist that warrant the application being publicly notified?</p> <p><input type="checkbox"/> Yes, publicly notify the application</p> <p><input checked="" type="checkbox"/> No, do not publicly notify the application but determine whether to give limited notification of the application under section 95B RMA 1991</p>
<p>95B Limited notification of consent applications</p> <p><i>(1) A consent authority must follow the steps set out in this section, in the order given, to determine whether to give limited notification of an application for a resource consent, if the application is not publicly notified under <a href="#">section 95A</a>.</i></p>	<p>Determination of whether to limited notify an application for resource consent.</p>
<p><i>Step 1: certain affected groups and affected persons must be notified</i></p> <p><i>(2) Determine whether there are any—</i></p> <p><i>(a) affected protected customary rights groups; or</i></p> <p><i>(b) affected customary marine title groups (in the case of an application for a resource consent for an accommodated activity).</i></p> <p><i>(3) Determine—</i></p> <p><i>(a) whether the proposed activity is on or adjacent to, or may affect, land that is the subject of a statutory acknowledgement made in accordance with an Act specified in <a href="#">Schedule 11</a>; and</i></p> <p><i>(b) whether the person to whom the statutory acknowledgement is made</i></p>	<p>Are there certain affected groups and affected persons that must be notified?</p> <p><input type="checkbox"/> Yes, notify each affected group and each affected person</p> <p><input checked="" type="checkbox"/> No</p>

<p>is an affected person under <a href="#">section 95E</a>.</p> <p>(4) Notify the application to each affected group identified under subsection (2) and each affected person identified under subsection (3).</p>	
<p>Step 2: if not required by step 1, limited notification precluded in certain circumstances</p> <p>(5) Determine whether the application meets either of the criteria set out in subsection (6) and,—</p> <p>(a) if the answer is yes, go to step 4 (step 3 does not apply); and</p> <p>(b) if the answer is no, go to step 3.</p> <p>(6) The criteria for step 2 are as follows:</p> <p>(a) the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes limited notification:</p> <p>(b) the application is for a resource consent for either or both of the following, but no other, activities:</p> <p>(i) a controlled activity that requires consent under a district plan (other than a subdivision of land):</p> <p>(ii) a prescribed activity (see <a href="#">section 360H(1)(a)(ii)</a>).</p>	<p>Is limited notification precluded in certain circumstances?</p> <p><input type="checkbox"/> Yes, got to step 4 (step 3 does not apply)</p> <p><input checked="" type="checkbox"/> No, go to step 3</p>
<p>Step 3: if not precluded by step 2, certain other affected persons must be notified</p> <p>(7) Determine whether, in accordance with <a href="#">section 95E</a>, the following persons are affected persons:</p> <p>(a) in the case of a boundary activity, an owner of an allotment with an infringed boundary; and</p> <p>(b) in the case of any activity prescribed under <a href="#">section 360H(1)(b)</a>, a prescribed person in respect of the proposed activity.</p>	<p>Are there certain other affected persons that must be notified?</p> <p><input checked="" type="checkbox"/> Yes, notify each affected person identified under subsections (7) and (8)</p> <p><input type="checkbox"/> No</p>

<p>(8) In the case of any other activity, determine whether a person is an affected person in accordance with <a href="#">section 95E</a>.</p> <p>(9) Notify each affected person identified under subsections (7) and (8) of the application.</p>	
<p><i>Step 4: further notification in special circumstances</i></p> <p>(10) Determine whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined to be eligible for limited notification under this section (excluding persons assessed under <a href="#">section 95E</a> as not being affected persons), and,—</p> <p style="padding-left: 40px;">(a) if the answer is yes, notify those persons; and</p> <p style="padding-left: 40px;">(b) if the answer is no, do not notify anyone else.</p>	<p>Do special circumstances exist that warrant the application being limited notified to any other persons not already determined to be eligible for limited notification under this section?</p> <p><input type="checkbox"/> Yes, notify those persons</p> <p><input checked="" type="checkbox"/> No, do not notify anyone else</p>