

CLEAN FILLS, MANAGED FILLS & C & D FILLS - SURVEY SUMMARY REPORT

Introduction

This report is a high level summary of the results of the WasteMINZ 'Clean fills, Managed fills and C & D fills' survey, conducted on behalf of the C & D Waste sector group. It has been prepared to assist the C & D Waste sector group when considering the results of the survey and the implications for their sector. It does not provide a detailed analysis of the survey results and should be read in conjunction with the standard survey summary report produced by Survey Monkey. A copy of this report, together with the survey summary report, will be published on the WasteMINZ website.

Background

This report has been produced from the data collected from the WasteMINZ 'Clean fills, Managed fills and C & D fills' (fills) survey conducted in May 2010.

Purpose

The purpose of the 'Clean fills, Managed fills and C & D fills' survey is to provide feedback from a range of stakeholders to be presented to the Ministry of the Environment (MfE). This follows the WasteMINZ workshops where the MfE stated that richer data was required to inform any future potential work-plan.

This is a key strategic area of concern for the WasteMINZ C & D Waste sector group, and WasteMINZ implemented the survey to support the work of that sector group.

The survey design

The survey questions were designed based on four key information need areas, being;

- the number of Clean fills, Managed fills and C & D fills;
- are these 'fills' being operated in accordance with the 2002 Guidelines;
- are there any further areas on concerns in regards to fills; and
- would respondents be willing to be contacted by MfE to discuss concerns around 'fills' further

The survey asked a total of 24 questions and was designed in four parts, being:

1. Clean fills
2. Managed fills
3. C & D fills
4. Respondents' details

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Survey management

The survey was prepared using Survey Monkey and the link was emailed to relevant special interest groups managed by WasteMINZ. These included the C & D Waste sector group and the TA forum.

In addition, the link with a brief synopsis was published in the WasteMINZ weekly e-newsletter.

Prior to the survey close date, WasteMINZ completed a gap analysis on areas that had not responded to the survey and emailed that group a reminder, which included the survey link.

The survey was launched on Friday 7 May 2010 and closed on Monday 31 May 2010.

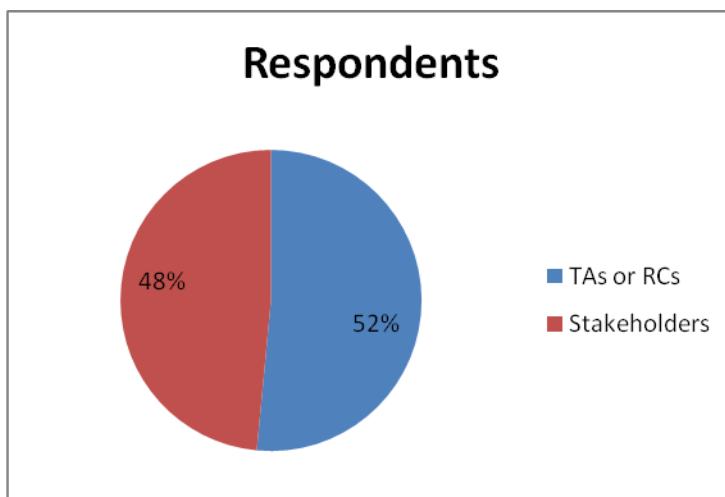
Respondents

A total of 66 responses were received, with 47 respondents providing permission to be contacted by MfE to discuss the matter further.

Respondents were a mix of territorial authorities (TAs), regional councils (RCs), and other stakeholders in the waste space.

Of the total 66 respondents, 34 or 52% were from either TAs or RCs, with the balance of 32 or 48% being other stakeholders.

Figure 1 - Respondents



Of the 16 regional areas in New Zealand, using the Regional Council boundary's as a guide, responses were received from 15 regions. The only regional area that did not respond to the survey was Taranaki.

Of the 71 TAs, responses were received from 31, being 44% of the total TAs.

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Further information is available in Appendix 1.

The number of Clean fills, Managed fills and C & D fills

Respondents were asked to advise the number of 'fills' in their area (referred to as reported) and if unsure to estimate the number (referred to as estimated). Each of these questions for Clean fills, Managed fills and C & D fills provided a numerical range for respondents to select.

Based on the responses provided, there are an estimated total number of 777 to 1,420 fills in New Zealand.

Figure 2 – Estimated total number of fills

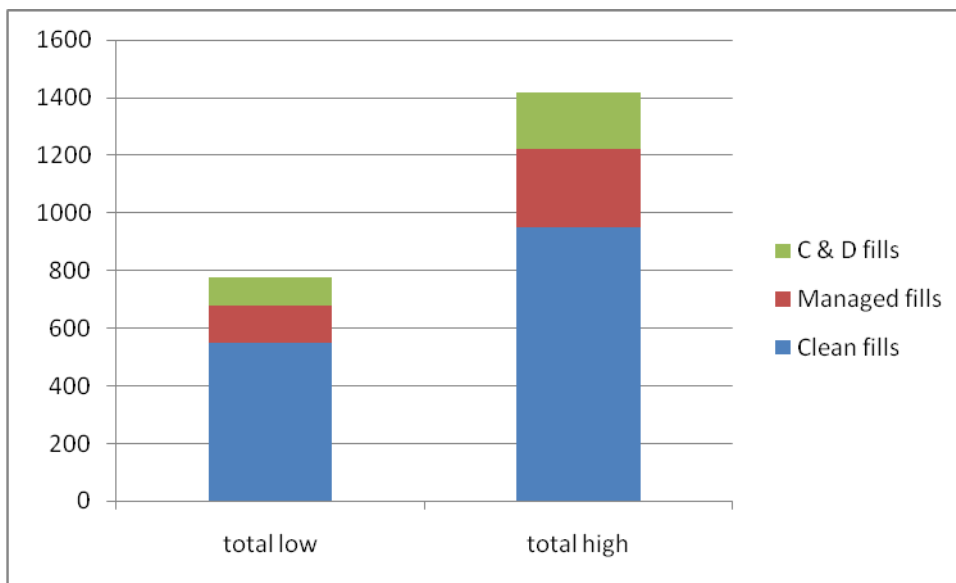
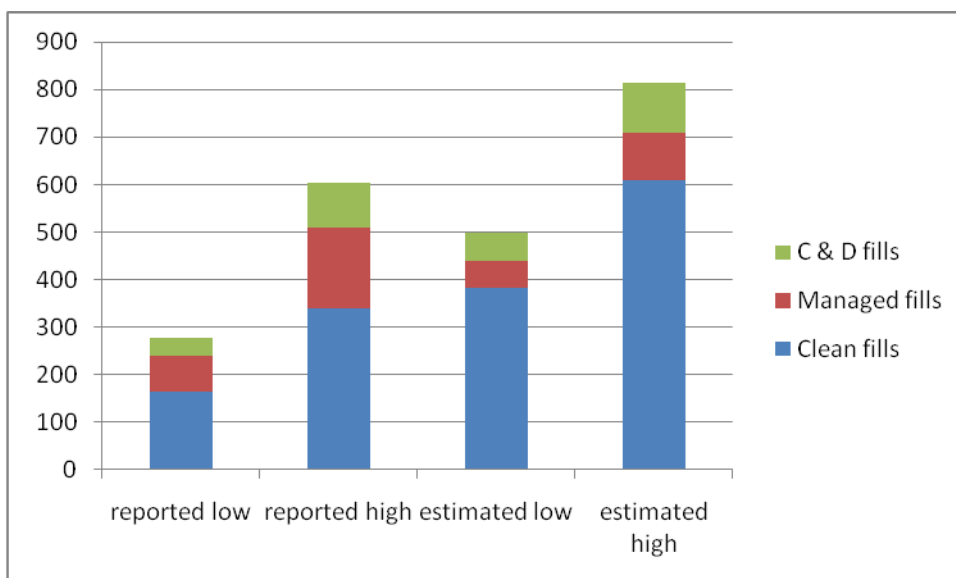


Figure 3 – Reported and estimated number of fills



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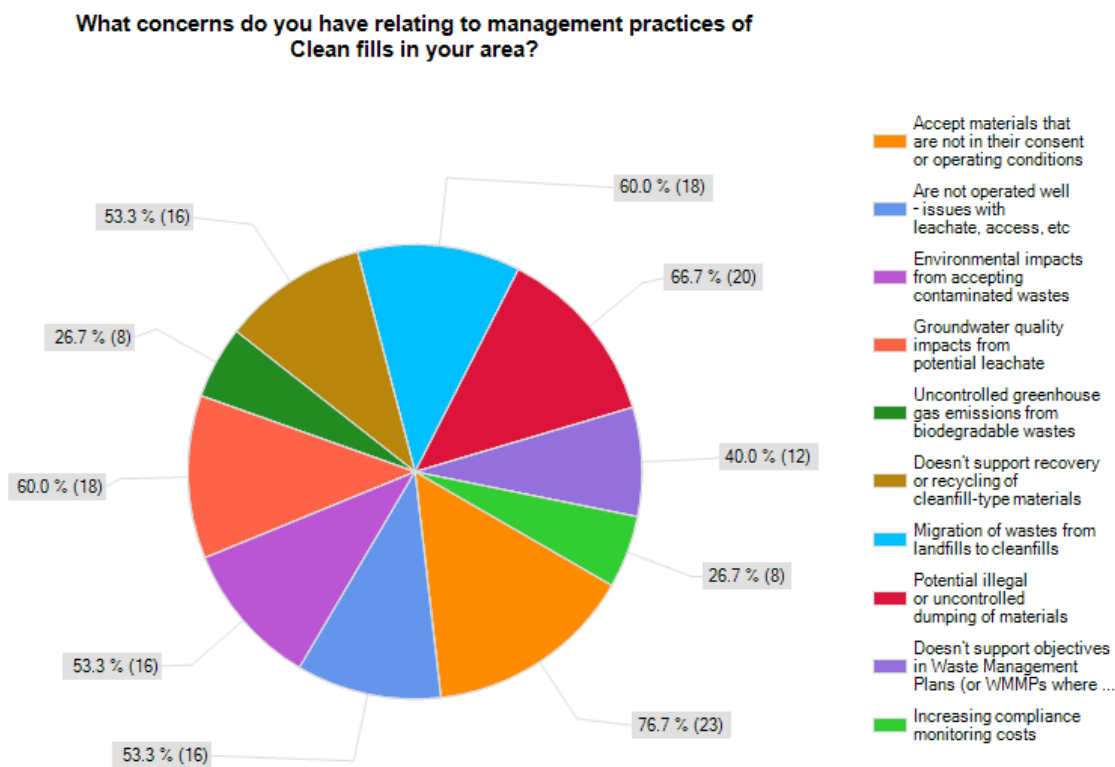
Are these 'fills' being operated in accordance with the 2002 Guidelines?

Clean fills

Of the 59 responses only 28 or 47.5% responded that they were aware of clean fills in their area accepting waste that is not consistent with the 2002 Guidelines.

However when asked if there were any concerns relating to the management practices of clean fills in their area, 37 responses were received with 78.4% of these respondents being most concerned that clean fills were accepting materials that are not in their consent or operating conditions. Figure 4 below details the other responses received (please note – respondents were able to select more than one response).

Figure 4 – Concerns regarding management practices of clean fills



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Managed fills

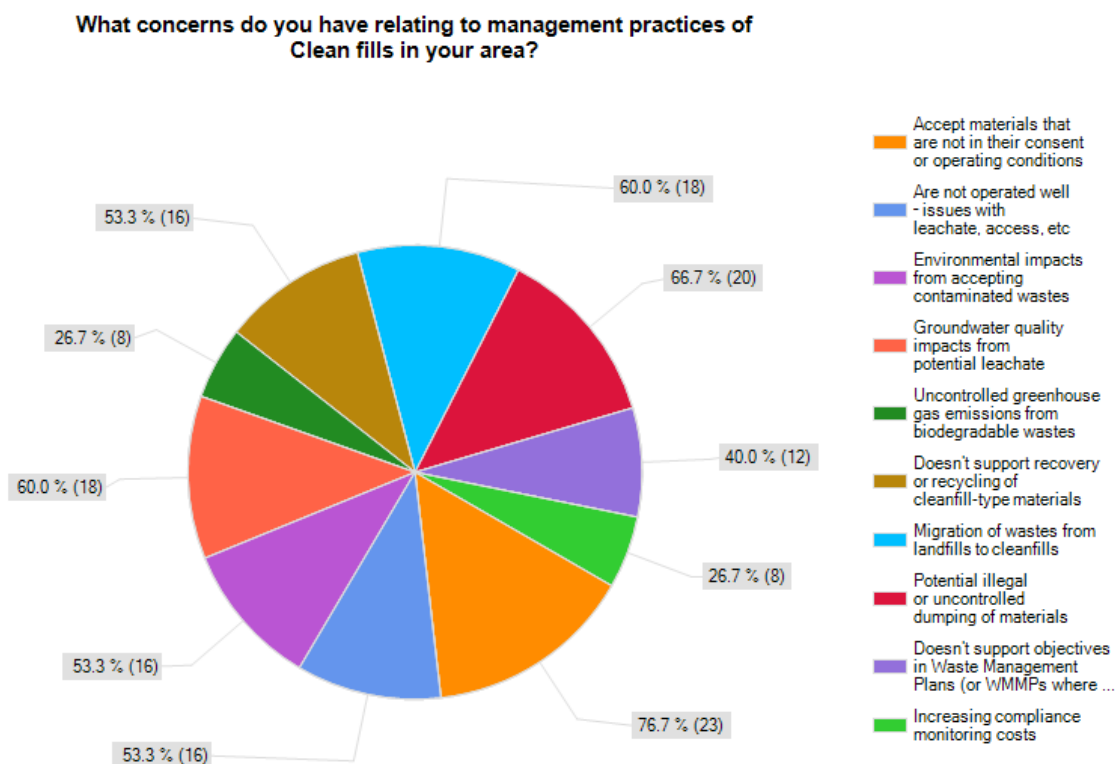
Similarly for managed fills, only 22 respondents or 48.9% of the total 45 responses received to the question ‘do you have any concerns around managed fill operating practices in your area?’, indicated that they were concerned.

When asked what types of concerns around managed fill operating practices they had, the 24 respondents identified three significant areas with a 70.8% response rate. These three areas were:

- Accepting materials that do not align with the 2002 clean fill guidelines
- Accepting potentially hazardous materials such as contaminated soils, road sweepings, road sump cleanings and asbestos
- Environmental impacts from accepting contaminated wastes

Figure 5 below details the other responses received (please note – respondents were able to select more than one response).

Figure 5 – Concerns regarding management practices of managed fills



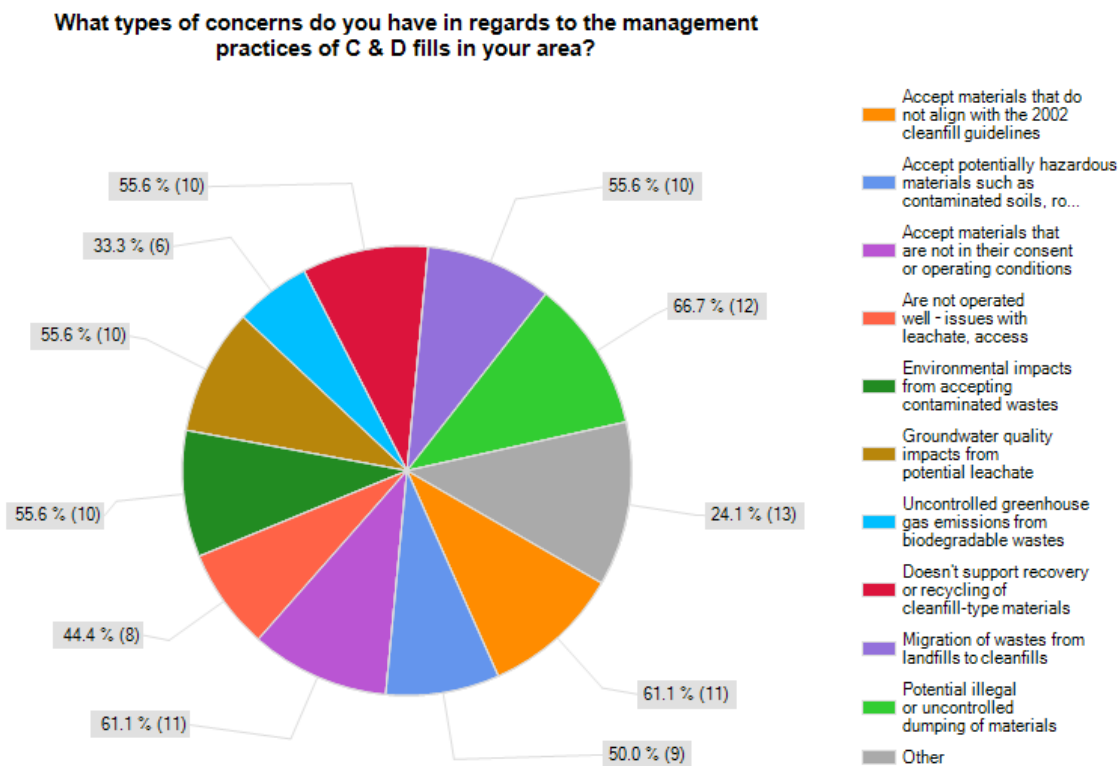
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C & D fills

As indicated in figures 2 and 3 above, there are much smaller numbers of C & D fills in New Zealand, being an estimated range of somewhere between 100 to 200 nationwide.

Only 21 respondents, being 36.8% of the responses, were aware of C & D fills operating in their area. When asked if there were any concerns with the management practices of C & D fills in their area, 20 respondents confirmed yes and were predominantly concerned with the potential illegal or uncontrolled dumping of materials (66.7%).

Figure 6 – Concerns regarding management practices of managed fills



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Are there any further areas of concerns in regards to fills?

Respondents were invited to provide additional comments for each of the three survey areas of clean fills, managed fills and C & D fills.

These additional comments have been retained in a database, but can be broadly categorised as follows;

- These fills are/fill a valid part of the waste management industry
- Clear operating and acceptance criteria required for clean fills, managed fills and C & D fills
- Lack of quality information
- Mixed responses around the introduction of a levy
- Economic instruments should be considered to encourage greater resource recovery
- Environmental harm due to the current lack of register of fills, standards, enforcement and training
- Co-ordinated national strategy required (consent, monitor and enforce)

About WasteMINZ

WasteMINZ was founded in 1989 and is the largest membership based organisation operating in the waste space representing central and local government, waste management and resource recovery specialists, and other entities that operate within the waste management and minimisation space including; manufacturers, engineers, planners, consultants, educators and researchers, as well as environmentalists and community groups.

WasteMINZ' vision is to deliver value to its members through the facilitation and shaping of best practice for environmentally sustainable waste management for New Zealand, by being;

- a resource for championing sustainable business and waste minimisation
- active in the development of future environmental and economic solutions and policy for waste minimisation

CLEAN FILLS, MANAGED FILLS & C & D FILLS - SURVEY SUMMARY REPORT
APPENDIX 1

RESPONSES BY REGION AND AREA			
Region	Area	Identified reply received	
		TA/RC	Other
Auckland	Auckland Region	✓	✓
	Rodney District Council		
	North Shore City Council	✓	
	Auckland City Council		✓
	Waitakere City Council	✓	✓
	Manukau City Council		
	Papakura District Council	✓	
Bay of Plenty	Bay of Plenty	✓	
	Tauranga City Council	✓	✓
	Western Bay of Plenty District Council		
	Rotorua District Council		
	Kawerau District Council		
	Whakatane District Council		
	Opotiki District Council		
Canterbury	Canterbury Region	✓	✓
	Kaikoura District Council	✓	
	Hurunui District Council	✓	
	Waimakariri District Council	✓	
	Christchurch City Council	✓	✓
	Selwyn District Council	✓	
	Ashburton District Council	✓	
	Timaru District Council	✓	
	Mackenzie District Council		
	Waitaki District Council		
Waimate District Council	✓		
Gisborne	Gisborne District Council	✓	✓
Hawke's Bay	Hawkes Bay		✓
	Wairoa District Council		
	Hastings District Council		
	Napier City Council		
	Central Hawke's Bay District Council	✓	
Manawatu-Wanganui	Ruapehu District Council		
	Wanganui District Council		
	Rangitikei District Council		
	Manawatu District Council		✓
	Tararua District Council		
	Palmerston North City Council		
	Horowhenua District Council	✓	

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
RESPONSES BY REGION AND AREA			
Region	Area	Identified reply received	
		TA/RC	Other
Marlborough	Marlborough District Council	✓	✓
Nelson	Nelson City Council	✓	✓
Northland	Far North District Council	✓	
	Whangarei District Council	✓	
	Kaipara District Council		
Otago	Queenstown Lakes District Council	✓	
	Central Otago District Council	✓	
	Dunedin City Council	✓	
	Clutha District Council		
Southland	Southland District Council	✓	✓
	Gore District Council		
	Invercargill City Council		
	Chatham Islands Council		
Taranaki	New Plymouth District Council		
	South Taranaki District Council		
Tasman	Tasman District Council	✓	
Waikato	Waikato Region	✓	✓
	Franklin District Council		
	Thames-Coromandel District Council	✓	✓
	Hauraki District Council		
	South Waikato District Council		
	Matamata-Piako District Council	✓	
	Hamilton City Council		✓
	Waipa District Council		
	Otorohanga District Council	✓	
	Waitomo District Council		
Taupo District Council			
Wellington	Wellington region		✓
	Masterton District Council		
	Carterton District Council		
	Kapiti Coast District Council		
	Wellington City Council	✓	
	South Wairarapa District Council		
	Hutt City Council		
	Upper Hutt City Council		
	Porirua City Council	✓	
West Coast	Buller District Council	✓	✓
	Grey District Council		
	Westland District Council	✓	

Clean fills, Managed fills and C & D fills






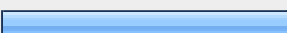
1. Which region or district/city (area) do your answers relate to? If you wish provide responses for more than one region, please complete a separate survey.

	Response Count
	66
<i>answered question</i>	66
<i>skipped question</i>	0


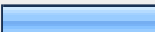
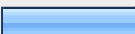



2. Are you aware of any Clean fills in your area? Definition from the MfE website - A cleanfill is any landfill that accepts only cleanfill material, which is defined as being material that when buried will have no adverse effect on people or the environment. Cleanfill material includes virgin natural materials such as clay, soil and rock, and other inert materials such as concrete or brick that are free of: combustible, putrescible, degradable or leachable components; hazardous substances; products or materials derived from hazardous waste treatment, hazardous waste stabilisation or hazardous waste disposal practices; materials that may present a risk to human or animal health such as medical and veterinary waste, asbestos or radioactive substances; and liquid waste.

	Response Percent	Response Count
Yes 	89.4%	59
No 	10.6%	7
<i>answered question</i>		66
<i>skipped question</i>		0

3. If yes - how many Clean fills are in your area?

	Response Percent	Response Count
0 - 5 	32.1%	18
6 - 10 	12.5%	7
11 - 20 	3.6%	2
21 - 40 	3.6%	2
41 - 60 	1.8%	1
61+	0.0%	0
Unsure (please answer next question) 	46.4%	26
answered question		56
skipped question		10

4. Only answer this question if you answered 'unsure' to the previous question? If you are unsure as to the number of Clean fills in your area, but were to offer a guess, how many Clean fills would you guess to be in your area?

	Response Percent	Response Count
0 - 5 	28.6%	8
6 - 10 	25.0%	7
11 - 20 	21.4%	6
21 - 40 	10.7%	3
41 - 60 	7.1%	2
61+ 	7.1%	2
answered question		28
skipped question		38

5. Are you aware of any Clean fills in your area that accept waste that is not consistent with the 2002 guidelines?

		Response Percent	Response Count
yes		47.5%	28
no		52.5%	31
<i>answered question</i>			59
<i>skipped question</i>			7

6. If you are aware of Clean fills in your area that are accepting wastes that do not meet the requirements of the 2002 guidelines, what types of 'unacceptable wastes' are being accepted? You may select more than one response.

		Response Percent	Response Count
Green waste		60.0%	21
Contaminated soils		51.4%	18
Wood waste		62.9%	22
General waste		31.4%	11
Household waste		20.0%	7
Potentially hazardous waste such as contaminated soils, road sweepings, road sump cleanings, asbestos		45.7%	16
Unsure		22.9%	8
Other (please specify)			5
<i>answered question</i>			35
<i>skipped question</i>			31

7. Do you have any concerns in regards to the management practices of Clean fills in your area?			
		Response Percent	Response Count
yes		61.7%	37
no		38.3%	23
answered question			60
skipped question			6

8. If yes - what concerns do you have relating to management practices of Clean fills in your area? You may select more than one response			
		Response Percent	Response Count
Accept materials that are not in their consent or operating conditions		78.4%	29
Are not operated well – issues with leachate, access, etc		54.1%	20
Environmental impacts from accepting contaminated wastes		56.8%	21
Groundwater quality impacts from potential leachate		64.9%	24
Uncontrolled greenhouse gas emissions from biodegradable wastes		29.7%	11
Doesn't support recovery or recycling of cleanfill-type materials		51.4%	19
Migration of wastes from landfills to cleanfills		59.5%	22
Potential illegal or uncontrolled dumping of materials		64.9%	24
Doesn't support objectives in Waste Management Plans (or WMMPs where these already exist) or national waste targets		40.5%	15
Increasing compliance monitoring costs		24.3%	9
Other (please specify)			9
answered question			37


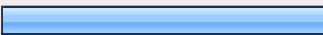
skipped question

29






9. Do you have any further comments you would like to make about Clean fill management practices?

	Response Count
	35
<i>answered question</i>	35
<i>skipped question</i>	31


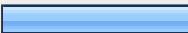

10. Are you aware of any Managed fills in your area? A 'managed fill' is a term that has been used in the Auckland Region, and in that region is defined as a disposal site requiring a resource consent from the Auckland Regional Council to accept well-defined types of waste, not including household waste, such as low-level contaminated soils and are often mono-fills that accept a single uniform type of waste material from an industrial process.

	Response Percent	Response Count
Yes 	47.5%	29
No 	52.5%	32
<i>answered question</i>		61
<i>skipped question</i>		5

11. If yes - how many Managed fills are there in your area?

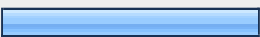
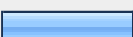
	Response Percent	Response Count
0 - 5 	58.1%	18
6 - 10 	12.9%	4
11 - 15 	3.2%	1
16 - 20	0.0%	0
21 - 25 	3.2%	1
26 - 30	0.0%	0
31+	0.0%	0
Unsure (Please respond to question 4) 	22.6%	7
answered question		31
skipped question		35

12. Only answer this question if you selected 'unsure' to Question 3 If you are unsure how many Managed fills are in your area, but were to offer a guess, how many Managed fills do you think may be in your area?

	Response Percent	Response Count
0 - 5 	60.0%	6
6 - 10 	30.0%	3
11 - 15	0.0%	0
16 - 20	0.0%	0
21 - 25	0.0%	0
26 - 30	0.0%	0
31+ 	10.0%	1
answered question		10
skipped question		56

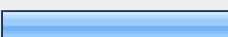
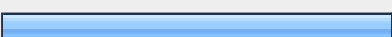
13. Do you have any concerns around Managed fill operating practices in your area?			Response Percent	Response Count
yes			48.9%	22
no			51.1%	23
			<i>answered question</i>	45
			<i>skipped question</i>	21

14. If you answered yes to the previous question - what types of concerns around Managed fill operating management practices in your area? You may select more than one response.			Response Percent	Response Count
Accept materials that do not align with the 2002 cleanfill guidelines			70.8%	17
Accept potentially hazardous materials such as contaminated soils, road sweepings, road sump cleanings, asbestos			70.8%	17
Accept materials that are not in their consent or operating conditions			62.5%	15
Are not operated well – issues with leachate, access			50.0%	12
Environmental impacts from accepting contaminated wastes			70.8%	17
Groundwater quality impacts from potential leachate			66.7%	16
Uncontrolled greenhouse gas emissions from biodegradable wastes			29.2%	7
Doesn't support recovery or recycling of cleanfill-type materials			54.2%	13
Migration of wastes from landfills to cleanfills			62.5%	15
Potential illegal or uncontrolled dumping of materials			54.2%	13
Doesn't support objectives in				




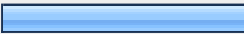
Waste Management Plans (or WMMPs where these already exist) or national waste targets		41.7%	10
Increasing compliance monitoring costs		20.8%	5
	Other (please specify)		4
answered question			24
skipped question			42

15. Do you have any further comments that you would like to make on Managed fills in your area?		Response Count
		22
answered question		22
skipped question		44


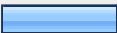


16. Do you have any further comments that you would like to make on Managed fills across New Zealand?		Response Count
		16
answered question		16
skipped question		50

17. Are you aware of any C & D fills in your area? There is no one recognised definition for C&D fills in New Zealand, but they can be loosely defined as fills that accept only waste from C&D sources, but a wider range of C&D wastes than that listed in the 2002 Cleanfill Guidelines (which excludes combustible, putrescible, degradable or leachable components; hazardous substances; and asbestos).			
		Response Percent	Response Count
yes		36.8%	21
no		63.2%	36
answered question			57
skipped question			9

18. If yes - how many C & D fills are there in your area?


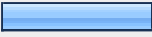
	Response Percent	Response Count
0 - 5 	43.5%	10
6 - 10 	13.0%	3
11 - 15 	4.3%	1
16 - 20	0.0%	0
21 - 25	0.0%	0
26 - 30	0.0%	0
31+	0.0%	0
Unsure (please answer next question) 	39.1%	9
answered question		23
skipped question		43

19. If you answered 'unsure' to the previous question, but would offer a guess as to how many C & D fills there could be in your area, how many would you guess?

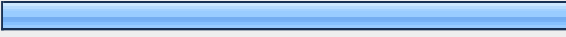

	Response Percent	Response Count
0 - 5 	63.6%	7
6 - 10 	18.2%	2
11 - 15	0.0%	0
16 - 20 	9.1%	1
21 - 25	0.0%	0
26 - 30 	9.1%	1
31+	0.0%	0
answered question		11
skipped question		55

20. Do you have any concerns in regards to the management practices of C & D fills in your area?			Response Percent	Response Count
yes			51.3%	20
no			48.7%	19
answered question				39
skipped question				27

21. If you answered yes to the previous question - what types of concerns do you have in regards to the management practices of C & D fills in your area? You may select more than one response.			Response Percent	Response Count
Accept materials that do not align with the 2002 cleanfill guidelines			61.9%	13
Accept potentially hazardous materials such as contaminated soils, road sweepings, road sump cleanings, asbestos			52.4%	11
Accept materials that are not in their consent or operating conditions			57.1%	12
Are not operated well – issues with leachate, access			47.6%	10
Environmental impacts from accepting contaminated wastes			52.4%	11
Groundwater quality impacts from potential leachate			57.1%	12
Uncontrolled greenhouse gas emissions from biodegradable wastes			38.1%	8
Doesn't support recovery or recycling of cleanfill-type materials			57.1%	12
Migration of wastes from landfills to cleanfills			52.4%	11
Potential illegal or uncontrolled dumping of materials			66.7%	14
Doesn't support objectives in Waste Management Plans (or WMMPs where these already exist)			38.1%	8

or national waste targets			
Increasing compliance monitoring costs		14.3%	3
Other (please specify)		23.8%	5
answered question			21
skipped question			45

22. Do you have any other comments about C & D fills that you would like to add?		
		Response Count
		17
answered question		17
skipped question		49

23. Are you willing to be contacted by MfE to discuss the issues you have raised?			
		Response Percent	Response Count
Yes		92.2%	47
No		7.8%	4
answered question			51
skipped question			15

24. Please provide your contact details. If you have not indicated that you are willing to be contacted by MfE to discuss the issues you have raised, your contacted details will NOT be provided to them.

		Response Percent	Response Count
Name		100.0%	51
Title		94.1%	48
Company/Organisation		100.0%	51
Phone		86.3%	44
Mobile		76.5%	39
Email		96.1%	49
<i>answered question</i>			51
<i>skipped question</i>			15