

**Draft Criteria Worksheets:  
Example Siting Criteria for Landfill Sites Evaluation**

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**Example 1: Criteria and Measurement**

Criteria X: Population density near the site<sup>1</sup> — All other things being equal, a site located near areas with a low population density would have less potential for impacting humans.

Point Value	Measure
0	More than 750 ( <b>For EXAMPLE</b> ) people per square mile living within one-half mile of the site
2	Between 250 and less than 750 ( <b>For EXAMPLE</b> ) people per square mile living within one-half mile of the site
4	Less than 250 ( <b>For EXAMPLE</b> ) people per square mile living within one-half mile of the site

**Example 2: Application of Weighting Factor**

The Weighting Factors are multiplied by the point value for each of the siting criteria to determine the total score for a site for a criterion. The sum of the site score is the relative ranking of one site compared to all of the others.

Criterion	Weighting Factor	Site A		Site B	
		Point Value	Score	Point Value	Score
1 Displacement of res/bus	10	0	0	5	50
5 Proximity to parks/rec	5	3	15	3	15
9 Site visibility from road	3	5	15	1	3
13 Flora and fauna habitat	7	3	21	5	35
17 Schools/hospitals along access road	5	1	5	3	15
21 Number of parcels required	1	5	5	0	0
25 Impact of removal of site on tax base	1	5	5	3	3
29 Access road considerations	2	4	8	5	10
33 Suitability of cover material	3	3	9	3	9
37 Access to fire protection	1	3	3	3	3
<b>Total</b>			<b>86</b>		<b>143</b>

<sup>1</sup> Based on average of XXX persons per square mile in the County of Kaua'i. Measure derives 50% or approximately XXX persons per square mile as the starting point.

## DRAFT CRITERIA

### A. SOCIAL FACTORS

1. Population density near the site<sup>2</sup> — All other things being equal, a site located near areas with a low population density would have less potential for impacting humans.

Point Value	Measure
/0	More than XXX people per square mile living within one-half mile of the site
/2	Between XXX and less than XXX people per square mile living within one-half mile of the site
/4	Less than XXX people per square mile living within one-half mile of the site

2. Distance to nearest residence — The better site will be further from a residence than a lesser one. The distance is calculated from the expected location of landfilling to the residence, which gives a benefit to a site with a large buffer.

Point Value	Measure
/0	The nearest residence is located less than 300 feet from the location of the landfill face when the site begins operation
/3	The nearest residence is located between 300 and 500 feet from the landfill face
/5	The nearest residence is located more than 500 feet from the landfill face

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<sup>2</sup> Based on average of 1,500 persons per square mile in the City and County of Honolulu. Measure derives 50% or approximately 750 persons per square mile as the starting point.

3. Displacement of residences and/or businesses — Use of vacant land is much preferred.

Point Value	Measure
/0	More than <u>10</u> residences and/or businesses need to be displaced.
/3	More than <u>5</u> , but fewer than <u>9</u> residences and/or businesses need to be displaced.
/5	No residences and/or businesses need to be displaced.

**B. ENVIRONMENTAL FACTORS**

15. Groundwater/UIC Zone — Location over potable groundwater or in a UIC Zone.

Point Value	Measure
0	Located mauka of the UIC or No Pass Line
1	Located coincident with the UIC or No Pass Line with line(s) makai of the site; or located with the line(s) passing though the site.
5	Located makai of the UIC or No Pass Line

18. Wind direction in relation to populated areas — A site located so the trade winds blow away from populated areas would be superior to one where winds blow toward populated areas.

Point Value	Measure
0	The wind blows toward populated areas from the site more than 80% of the time
2	The wind blows toward populated areas from the site between 50 and 80% of the time
4	The wind blows toward populated areas from the site between 20 and 50% of the time
3	The wind blows toward populated areas from the site less than 20 percent of the time

**C. ECONOMIC FACTORS**

20. Haul distance from major generation areas – The cost of hauling MSW will be greater the further away the site.

Point Value	Measure
1	Site is greater than 60% more distant than the nearest site
3	Site is 40% to 60% more distant than the nearest site
4	Site is 20% to 40% more distant than the nearest site
5	Site is within 20% of the distance of the nearest one

- 22/23/24. Cost of acquisition, development, and operation — The cost of the site will impact the cost of operation of the landfill over its entire life.

Point Value	Measure
1	Site greater than 60% more costly than the lowest cost
3	Site is 40% to 60% more costly than the lowest cost
4	Site is 20% to 40% more costly than the lowest cost
5	Site within 20% of the lowest cost

25. Closure and post-closure cost — This criterion is the cost of closing and maintaining the closed landfill.

Point Value	Measure
1	Site greater than 60% more costly than the lowest cost
3	Site is 40% to 60% more costly than the lowest cost
4	Site is 20% to 40% more costly than the lowest cost
5	Site within 20% of the lowest cost

**D. TECHNICAL FACTORS**

26. Availability of utilities on the site — The ready availability of water and power will reduce the cost of the landfill.

Point Value	Measure
1	Utilities more than one mile from site
3	Utilities between one-half and one mile from site
4	Utilities between one-quarter and one-half mile from site
5	Utilities available on site

31. Proximity to parks and recreational facilities — A site located near a park or recreational facility would be less desirable as these other uses are located in areas that are valued for their more pristine environment.

Point Value	Measure
0	The site is located less than one-half mile from a park or recreation area
3	The site is located between one-half and one mile from a park or recreation area
5	The site is located more than one mile from a park or recreation area