

Expenditure Plan for Chadwich Lane Quarry Landfill

**CHADWICH LANE QUARRY WHOLE LANDFILL**

Environmental Issue	Description of Potential Works	Quantity	Rationale / Comment	Unit	Rate	Cost (£)	Probability (%)	Probable Cost (£)	Period of Aftercare (Years)	Anticipated Total Cost (£)
<b>Groundwater</b>	<b>Monitoring on Completion of Landfilling:</b>								1 to 3	
	Annually - includes reporting, monitoring and analysis	3	3 boreholes once per annum	No.	£200	£600	100	£600	£1,800	£1,800
	Quarterly Monthly - includes reporting, monitoring and	3	3 borehole two times per year	No.	£35	£245	100	£490	£1,470	£1,470
	Six monthly-includes reporting, monitoring and analysis	3	3 borehole two times per year	No.	£250	£750	100	£1,500	£4,500	£4,500
	Monthly	0		No.	£42	£0	0	£0	£0	£0
	Provision of replacement groundwater level/quality monitoring boreholes compared to present.	1	Over the aftercare period	No.	£1,000	£1,000	100	£1,000	£1,000	£1,000
	Supervision and reporting installation works.	1		-	-	£1,500	100	£1,500	£1,500	£1,500
<b>Surface Water</b>	<b>Monitoring on Completion of Landfilling:</b>									
	Annually - included with the leachate monitoring	0		No.	£106	£0	100	£0	£0	£0
	Six Monthly - included with the leachate monitoring	0		No.	£0	£0	100	£0	£0	£0
	Quarterly - included with the leachate monitoring	0		No.	£54	£0	100	£0	£0	£0
	Provision of surface water ditchcourses/collection facilities around the perimeter of the phase.	0	Covered under works permit	m	£0	£0	80	£0	£0	£0
<b>Landfill Gas</b>	<b>Monitoring on Completion of Landfilling:</b>									
	Quarterly monitoring	4	5 Internal and 8 external monitoring points	No.	£200	£800	100	£800	£2,400	£2,400
<b>Landfill Gas</b>	Annual monitoring flux box test not required as inert landfill	0			£0	£0	100	£0	£0	£0
<b>Capping</b>	Clay Cap	0	Area of phase/landfill	m <sup>2</sup>	£0	£0	100	£0	N/A	£0
	Supervision of the capping works.	0	Area of phase/landfill	-	£0	£0	100	£0	N/A	£0
<b>Restoration of the Landfill</b>	Provision and installation of field drainage	0	Area of phase/landfill	0	£0	£0	50	£0	N/A	£0
	Sourcing and supply of top soil	1	Area of phase/landfill	m <sup>3</sup>	£1.50	£100	100	£100	£100	£100
	Grass seeding	0	Area of phase/landfill	m <sup>2</sup>	£0.05	£0	95	£0	N/A	£0
	Grass cutting/maintenance	0	Area of phase/landfill	m <sup>2</sup>	£0.1	£0	95	£0	£0	£0
	Landscape planting (hedges only, not shrubs/plants)	0	Allowance	m	£1.2	£0	90	£0	N/A	£0
	Fencing (post and 2 strand barbed wire)	1	Perimeter boundary	m	£0	£0	1000	£0	N/A	£0
<b>Miscellaneous</b>	Survey for settlement assessment, including reporting.	1	Drone update		£1,500	£1,500	100	£1,500	£4,500	£4,500
	General maintenance of restoration and capping	1	Area of phase/landfill	rate	£550	£100	100	£550	£550	£550
	Site security fencing	0	Estimated length of repair	rate	£2.5	£100	0	£0	£0	£0
	Treatment of differential settlement	1	Area of phase/landfill	rate	£600	£600	100	£600	£1,800	£1,800
<b>Reports</b> <small>(for the whole landfill, not per phase)</small>	Annual report	1	Letter report			£500	100	£500	£1,500	£1,500
	Completion Application Report	1				£2,500			£2,500	£2,500
	Leachate build up (failure of the collection system)		Install leachate wells and pumps and recirculate leachate			£0	0	£0	N/A	£0
	Polluted surface water via leachate breakouts		Investigate and repair cap			£0	0	£0	N/A	£0
	Erosion of part of the cap and restoration soils (20m x 20m)		Investigate and repair			£0	0	£0	N/A	£0
						£10,195			£23,520	£23,520
<b>TOTAL</b>										

**Notes:** No specified events have been raised in the Risk Assessments

- 1) The above costs are based on 2022 prices
- 2) Survey costs based on fixed trig points set up on site and full annual survey
- 3) The "Probable Cost" is based on the likelihood of a particular item being required in the permit and weighted against all of the submitted risk assessments
- 4) Leachate monitoring is not required under the Permit
- 5) The costs for "Period of Aftercare" are set at three years for inert landfill sites
- 6) Surface water monitoring is not required
- 7) The costs cover the three exterior boreholes for groundwater and internal monitoring points
- 8) Costs provided for the clay capping works not required as this is an inert landfill.
- 9) Topsoil sourced from on site sources, not purchased and imported to site. Top soil from current stockpiles available as required under planning.
- 10) Annual report is simple letter form as approved with other Agency offices based on computer spreadsheets data
- 11) Cost of fence maintenance considered with 500 metres of repairs over 3 year period at £2.50/ metre as most of site is three strands of barbed wire
- 12) At restoration phase surface water discharge will be natural runoff with no consent
- 13) Costs Line 13 supervision of internal monitoring point repair assuming two days and Line 15 is for replacement boreholes inclusive of preparation of CQA Plan

**£23,520**