

Appendix C – Costs to Individual  
Land Application Activities

Duties	Count <sup>1</sup>	Service Fee Cost <sup>2</sup>	Month / Year	Equipment Rental Cost <sup>3</sup>	Total Cost / Year	% Adjust <sup>4</sup>	Adjusted Total Cost / Year
<b>Enforcement Agency Notification filing (low range):</b> Costs incurred by the Land Application Activity operator or owner to apply for the EA Notification regulatory tier to reflect the EA's service (filing) fee which is based on the EA's median hourly rate of \$168.83 (equivalent to 1 inspection). We know that there will be an inspection conducted by the EA after the completion of each land application, assuming up to 3 land applications, for that fiscal year. Additionally, it is difficult to justify the EA to charge for additional inspections once the EA notification has been issued if the EA notification filing fee only accounts for 1 inspection. This cost is based on a low range estimation that 10 sites that are land applying material would fall under the Land Application Activity regulatory tier. Thus, operators or owners would be required to file for an EA Notification with their LEAs. The formula to calculate the total cost for this low range is as follows: (Count) x (Service Fee costs).	10	\$505.25	N/A	N/A	\$5,052.50	N/A	N/A
<b>Enforcement Agency Notification filing (high range):</b> Costs incurred by the Land Application Activity operator or owner to apply for the EA Notification regulatory tier to reflect the EA's service (filing) fee which is based on the EA's median hourly rate of \$168.83 (equivalent to 1 inspection). We know that there will be an inspection conducted by the EA after the completion of each land application, assuming up to 3 land applications, for that fiscal year. This cost is based on a high range estimate that 100 sites that are land applying material would fall under the Land Application Activity regulatory tier. Thus, operators or owners would be required to file for an EA Notification with their LEAs. The formula to calculate the total cost for this high range is as follows: (Count) x (Service Fee costs).	100	\$505.25	N/A	N/A	\$50,525.00	N/A	N/A

<sup>1</sup> Duty count is an estimate based on the state's level of knowledge and experience regarding active, illegal land application activities under enforcement.

<sup>2</sup> For EA Notification Filing, Service (Filing) fee costs is an average of the fees incurred by the operator to file a notification and be inspected 3 times per fiscal year by the local solid waste enforcement agency.  
For Equipment Delivery, Service (Delivery) fee cost is the based on the average cost of equipment delivery fee.

<sup>3</sup> Equipment rental cost is based on the average monthly equipment rental rate in California, assuming the scenario that operator or owner would need equipment to spread material on the land.

<sup>4</sup> % Adjustment is based on unknown costs associated with renting the equipment such as use tax (average 8.837%), fuel cost, rental insurance cost (high of 16%), delivery/return cost (up to \$200 one way), etc.

## Appendix C – Costs to Individual

<b>Skid Steer - Equipment Rental (low range):</b> Costs incurred by the Land Application Activity operator or owner to rent and use skid steer equipment for the purpose of spreading the material with the front bucket and pulling the tiller attachment to incorporate material into the land. The rental period is for a month as the regulations indicate that material shall be applied within 48 hours of receipt and must be incorporated within 30 days. Although rental company staff explained that tilling material on 5 acres would take a few days to complete, the 30-day requirement to incorporate the material would capture the highest cost for renting equipment. Thus, the highest cost for renting a middle-tier track skid steer sufficient to complete the task is \$4,200 per month. The equipment rental is also based on a low range estimate that 10 sites that fall under the Land Application Activity regulatory tier and would require a maximum period of one month to complete land application. We assume that the low range will capture only 1 land application completion in a fiscal year. For unknown cost associated with renting the equipment such as use tax (average 8.837%), fuel cost, rental insurance cost (high of 16%), delivery/return cost (up to \$200 one way), etc., a 30% adjustment was incorporated to capture these unknown costs. The formula for calculating the total cost for this low range is as follows: (Number of Activities) x (Number of land application frequency per year) x (Equipment Cost per month) + (Number of Activities) x (Number of land application frequency per year) x (Equipment Cost per month) x (% Adjustment).	10	N/A	1	\$4,200	\$42,000	30%	\$54,600
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## Appendix C – Costs to Individual

<b>Tiller Attachment Rental (low range):</b> Costs incurred by the Land Application Activity operator or owner to rent and use a rotary tiller (or disk) attachment, towed by the skid steer to spread and incorporate material into the land. The rental period is for a month as the regulations indicate that material shall be applied within 48 hours of receipt and must be incorporated within 30 days. Although consultants explained that tilling material on 5 acres would take a few days, the 30-day requirement to incorporate the material would capture the highest cost for renting equipment. Thus, the highest cost for renting a middle-tier track skid steer sufficient to complete the task is \$2,400 per month. The equipment rental is also based on a low range estimate that 10 sites that fall under the Land Application Activity regulatory tier and would require a maximum period of one month to complete land application. We assume that the low range will capture only one land application completion in a fiscal year. For unknown cost associated with renting the equipment such as use tax (average 8.837%), fuel cost, rental insurance cost (high of 16%), delivery/return cost (up to \$200 one way), etc., a 30% adjustment was incorporated to capture these unknown costs. The formula for calculating the total cost for this low range is as follows: (Number of Activities) x (Number of land application frequency per year) x (Equipment Cost per month) + (Number of Activities) x (Number of land application frequency per year) x (Equipment Cost per month) x (% Adjustment).	10	N/A	1	\$2,400	\$24,000	30%	\$31,200
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<sup>3</sup> Equipment rental cost is based on the average monthly equipment rental rate in California, assuming the scenario that operator or owner would need equipment to spread material on the land.

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## Appendix C – Costs to Individual

<b>Tiller Attachment Rental (high range):</b> Costs incurred by the Land Application Activity operator or owner to rent and use a tiller (or disk) attachment, towed by the skid steer to spread and incorporate material into the land. The rental period is for a month as the regulations indicate that material shall be applied within 48 hours of receipt and must be incorporated within 30 days. Although consultants explained that tilling material on 5 acres would take a few days, the 30-day requirement to incorporate the material would capture the highest cost for renting equipment. Thus, the highest cost for renting a middle-tier track skid steer sufficient to complete the task is \$2,400 per month. The equipment rental is also based on a high range estimate that 100 sites that fall under the Land Application Activity regulatory tier and would require a maximum period of one month to complete land application. We assume that the high range will capture only 3 land application completion in a fiscal year. For unknown cost associated with renting the equipment such as use tax (average 8.837%), fuel cost, rental insurance cost (high of 16%), delivery/return cost (up to \$200 one way), etc., a 30% adjustment was incorporated to capture these unknown costs. The formula for calculating the total cost for this high range is as follows: (Number of Activities) x (Number of land application frequency per year) x (Equipment Cost for Land Application per month) + (Number of Activities) x (Number of land application frequency per year) x (Equipment Cost per month) x (% Adjustment).	100	N/A	3	\$2,400	\$720,000	30%	\$936,000
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Item	Low Range	High Range
Individuals (Land Application Activities)	\$90,852.45	\$2,624,524.50

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