

§ 3805.1. Financial Assurance Cost Estimate Form.

Title 14. Natural Resources Division 2.
Department of Conservation
Chapter 8. Mining and Geology
Subchapter 1. State Mining and Geology Board
Article 11. Financial Assurance Mechanisms

Adopt new 14 CCR § 3805.1

§ 3805.1. Financial Assurance Cost Estimate Form

The Financial Assurance Cost Estimate shall consist of form FACE-1 (10/16), which is hereby incorporated by reference.

NOTE

Authority cited: Section 2755, Public Resources Code. Reference: Sections 2770, 2773.1(a)(1)-(a)(4), and 2773.4.

FINANCIAL ASSURANCE COST ESTIMATE FORM INSTRUCTIONS

This form is intended to comply with the requirements of California's Surface Mining and Reclamation Act (SMARA – Public Resource Code Sections 2710 et seq., and the associated California Code of Regulations found in Title 14, division 2, beginning at 3500, hereinafter respectively "PRC" or "CCR") and specifically PRC §2773.1(a)(4). This form, (FACE-1) shall be used to submit the calculated financial assurance amount to the lead agency for review.

The amount of a financial assurance mechanism required for reclamation of a surface mining operation must be approved and established prior to operations, and annually thereafter approved following lead agency review and, if necessary, adjusted each calendar year. PRC §2773.4(d)(1) requires that annual Financial Assurance Cost Estimates (FACE) shall be submitted to the lead agency for review within 30 days of an annual inspection or within 30 days of the inspection date requested on the operator's Annual Report, Form MRRC-2, if the inspection was not conducted by the lead agency. FACE's for new reclamation plans or reclamation plan amendments shall be approved by the lead agency, and the existing financial assurance mechanism adjusted, prior to the commencement of operations or substantial deviation, respectively.

The amount of financial assurance required of a Surface Mining Operation (SMO) represents the cost for the lead agency or the Division of Mine Reclamation to complete reclamation of all disturbed lands in accordance with the approved reclamation plan utilizing third party contractors in the event the operator is unable to do so. Reclamation of SMO's by a lead agency or the Department is presumed to be a "public works project" as defined in California Labor Code (Division 2, Part 7, Chapter 1, Article 1, Section 1720) and subject to requirements of California's Prevailing Wage Law. Hourly labor costs and employer labor burden used for calculation of the financial assurance shall be consistent with Department of Industrial Relations prevailing wage requirements for the chosen labor category (payroll taxes, workers comp, etc., paid hourly by an employer), where applicable. In addition, equipment costs and production rates shall be supported by verifiable third party estimates, bids, or cost calculations, and/or lead agency accepted construction estimating handbooks, such as the Caltrans Equipment Rental Rate and Labor Surcharge, Caterpillar Performance Handbook, Means Heavy Construction Handbook, etc.

Prior to preparing the cost estimate, review the approved reclamation plan and any amendments as well as the most recent lead agency inspection report. In addition, the cost estimate must reference costs associated with other reclamation requirements included by reference, including conditions of approval, other permit requirements and supplementary documents such as environmental documents prepared for the project pursuant to the California Environmental Quality Act (Division 13 (commencing with Section 21000)) that specifically relate to reclamation of the mine site.

Please read the following instructions carefully before preparing the cost estimate. If a section is not applicable, please indicate so with a brief statement. Sections may be duplicated as necessary to capture each activity required to complete reclamation in accordance with the approved reclamation plan. Following receipt and review of this FACE form, the lead agency may request additional information, revisions or amendments before final approval.

SECTION I – SUPPORTING DOCUMENTS

Reclamation Plan Approval date and Number: Provide the date of approval and document number for the reclamation plan and any subsequent amendments.

Documents made part of Reclamation Plan by Reference: Provide information regarding other information, document, or component of a document, included in the reclamation plan by reference, which may include conditions of approval, other permit requirements and supplementary documents, such as environmental documents prepared for the project pursuant to the California Environmental Quality Act (Division 13 (commencing with Section 21000) that specifically relate to reclamation of the mine site.

Other Agency Financial Assurances Securing Reclamation of Disturbed Lands: Provide information regarding current bonds, held with other agencies that exercise jurisdiction over the SMO, that cover the costs of achieving the approved reclamation plan performance standards and end use. Please include the amount of those costs, whether financial assurance mechanisms have been established to cover those costs, the names of the public agencies, the names of the beneficiaries, and the expiration date, if any, of those financial assurance mechanisms.

Wage Rates used in Cost Estimate: Provide citations to appropriate labor handbooks used to calculate labor burden. Reclamation of SMO's by a lead agency or the Department is presumed to be a "public works project" as defined in California Labor Code (Division 2, Part 7, Chapter 1, Article 1, Section 1720) and subject to the requirements of California Prevailing Wage Law. Hourly labor costs used for calculation of the financial assurance shall be the sum of the Department of Industrial Relations listed prevailing wage for the chosen labor category and the employer labor burden (payroll taxes, workers comp, etc., paid hourly by an employer) where applicable. Third party estimates relied upon by the preparer to determine the amount of financial assurances shall be prepared utilizing California Prevailing Wage requirements.

Equipment Rates Used in Cost Estimate: Provide citations to lead agency accepted equipment cost handbooks, such as the Caltrans Equipment Rental Rate and Labor Surcharge, Means Heavy Construction Handbook, etc., or verifiable third party estimate relied upon to calculate financial assurance.

Equipment Production Rates used in Cost Estimate: Provide citations to lead agency accepted equipment production rates, such as the Caterpillar Performance Handbook, Means Heavy Construction Handbook, etc. or verifiable third party estimate relied upon to calculate financial assurance.

Attachments: Subcontractor and/or supplier quotes, and/or third party estimates, and any relevant references relied upon to calculate the cost estimate (such as recent surveyed site topography, consultant's reports, stipulated orders to comply, etc.) shall be attached to the

FACE form and listed in "Attachments." Previous inspection reports, cost calculation worksheets, or other documents may be attached to the completed FACE-1 form as necessary to support the estimated financial assurance amount.

SECTION II – DESCRIPTION OF CURRENT SITE CONDITIONS

Provide a brief description of current site conditions with a focus on details that relate to the cost of reclamation activities required to meet the performance standards of the approved reclamation plan; such as: plant structures, foundations, equipment, stockpiles (processed material, waste, and import), total disturbed area, highwall/slope angles, pit depth, ponds, erosion control, streams and wetlands, sensitive species, revegetation, etc.

SECTION III – DESCRIPTION OF ANTICIPATED SITE CONDITIONS

Provide a brief description of the anticipated condition of the mine site in one year, with a focus on anticipated changes that will affect the cost to complete reclamation in accordance with the performance standards of the approved reclamation plan, such as: plant structures, foundations, equipment, stockpiles (material, waste, and import), total disturbed area, highwall/slope angles, pit depth, ponds, erosion control, streams and wetlands, sensitive species, revegetation, etc.

SECTION IV – DESCRIPTION/JUSTIFICATION OF COST INCREASE/DECREASE

Provide a brief description/justification for the proposed increase or decrease to existing financial assurance amount.

SECTION V – PLANT STRUCTURES AND EQUIPMENT REMOVAL

Current Site Condition: Provide a description of the current plant site conditions and structures present.

Reclamation Plan Performance Standard (End Use): Describe the performance standards for reclamation and the end use of the plant area required by the approved reclamation plan

Describe Tasks: Describe the anticipated tasks to achieve the required performance standards and end use described by the approved reclamation plan.

Equipment Lien Holder Information:

The operator shall provide the name (names) and contact information for any lien holder and the amount of any liens held on the equipment. This information will assist the lead agency's assessment of the physical and administrative costs to remove equipment and apprise them of ownership.

Methods to be Used: Estimate the equipment and labor costs of dismantling and/or demolition and removal of structures, equipment (mobile and fixed), debris, and final cleanup of the mine site. Specific equipment, structural materials, and/or debris may have salvage value. Salvage value may only be used to offset the cost of removal of the specific item being appraised, excess salvage value may not be used to offset any other cost of reclamation. If salvage value is being claimed, documentation must be provided to the lead agency for review. Third party estimates, bids, cost calculations, verifying salvage values shall be attached to the form and listed in "Attachments," Section 1. The value of overburden, process fines, stockpiled pit run or processed material may not be used to offset the cost of removal or reclamation of such materials. Third party estimates, bids, or cost calculations for reclamation and/or surplus/salvage value shall include the following information:

- Name and location of company or contractor
- Statement of qualification and experience
- Location of mine site and California Mine ID#
- Description of such work
- Dates that third party estimates, bid, or cost calculations are in effect

SECTION VI – PRIMARY RECLAMATION ACTIVITY

Section VI shall be used to calculate the cost of primary reclamation activities required to meet the performance standards of the approved reclamation plan and the site end use. Primary reclamation activities may include:

- Grading – cuts, fills, export, etc.
- Erosion Control (BMP's, Structures)
- Ponds/Detention Basins
- Stream and Wetland Protection
- Sensitive Wildlife and Plant Protection
- Soil/Overburden Stockpile Management
- Closure of Adits

It is recommended that Section VI be duplicated as necessary to calculate the primary cost of each activity required to meet the end use and reclamation plan performance standards. List the activity being estimated at the top of first page of Section V.

Current Site Conditions: Provide a brief narrative describing the current condition of the site as it relates to the reclamation activity being estimated, such as the current/anticipated slope angle of the highwall, etc.

Reclamation Plan Performance Standard (End Use): Provide a description of the performance standards/reclamation requirements of the approved reclamation plan, as detailed in the Supporting Documents, cited in Section I, that pertain to the primary reclamation activity being estimated.

Describe Tasks, Methods, Equipment, etc.: Provide a description of the tasks required to complete the activities being estimated. Include a description of the equipment and materials needed to complete reclamation of the activity being estimated.

Provide Quantities: Provide estimates of the volumes of overburden, topsoil, cut and fill, import, and export, etc., that will need to be handled to accomplish reclamation. Describe anticipated acres of disturbance, haul distances, and equipment production rates.

Methods to be Used:

Estimate the cost of equipment, labor, and materials required to meet end use and performance standards described by the approved reclamation plan. Equipment and materials included in this section shall be from lead agency accepted sources such as Caltrans Equipment Rental Rate and Labor Surcharge, Caterpillar Performance Handbook, Means Heavy Construction Handbook, etc., or third party estimate. Labor rates shall be calculated on the sum of the Department of Industrial Relations published prevailing wage for the chosen labor category and the employer labor burden (payroll taxes, workers comp, etc., paid hourly by an employer).

SECTION VII - REVEGETATION

Section VII shall be used to calculate costs associated with revegetation of disturbed areas. Revegetation activities may include, but are not limited to: soil preparation/amendment, mulching, installation of irrigation systems, watering, custom seed/plant collection, nursery services, seed mixes (pure live seed) and containerized plants, hydroseeding, seed/plant installation, plant protection, and remediation. Refer to the approved reclamation plan or revegetation program to determine the various tasks and materials required to revegetate the site.

Current Site Condition: Provide a brief description of the current conditions at the site as it relates to revegetation, such as the amount of topsoil stored or needed for import and acres requiring revegetation, etc.

Reclamation Plan Performance Standard (End Use): Provide a description of the performance standards/reclamation requirements of the approved reclamation plan, as detailed in the Supporting Documents, cited in Section I, that pertain to revegetation of the site.

Describe Tasks: Describe the required tasks anticipated to complete reclamation in accordance with the approved reclamation plan. Tasks may include decompaction, placement of growth medium, seeding, planting, construction of irrigation systems, fencing, etc.

Methods to be used: Estimate the cost of equipment, labor, and materials required to meet end use and performance standards described by the approved reclamation plan. Equipment and materials costs included in this section shall be from lead agency accepted sources or supported by verifiable third party contractor bids or estimates. Labor rates shall be calculated on the sum of the Department of Industrial Relations listed prevailing wage for the chosen labor category and the employer labor burden (payroll taxes, workers comp, etc., paid hourly by an employer).

Provide the unit of measure (i.e. pallet, pound, ton) in the materials table for the type of material to be used.

SECTION VIII- MISCELLANEOUS COSTS

Section VIII shall be used to list any miscellaneous costs for materials, any applicable taxes and employer 'labor burden' (payroll taxes, workers comp, etc., paid hourly by an employer) when not included elsewhere, and labor or services required to complete final reclamation and closure of the site (i.e. plant decommissioning, lead agency final inspections, reclamation mitigation measures, etc.). Using the table provided, list the items or services required, the quantity, unit costs (if applicable) and total costs..

SECTION IX – MONITORING COSTS

Section IX shall be used to list costs of required monitoring of the site once initial reclamation has been completed. The costs may include monitoring for successful revegetation and habitat establishment, slope stability, erosion control, access controls, or site remediation (i.e. process reagents/hydrocarbons). Monitoring required by other agencies (i.e. California Regional Water Quality Control Board) that are covered under a separate financial assurance mechanism should be listed for reference. Using the table provided, list the monitoring task, the cost per site visit/monitoring event (include all costs associated with planning and completing the site visit/monitoring events), the number of site visits/monitoring events per year, the number of monitoring years and total cost. If a consultant will be conducting the monitoring, provide a copy of the estimate or contract. Remember, the costs of a site visit start well before arriving at a site and continue after leaving a site in the form of pre-visit preparations and post-visit record keeping and report preparation.

SECTION X – SUMMARY OF COSTS

Summarize the costs calculated in Sections IV through VIII.

SECTION XI – SUPERVISION/PROFIT & OVERHEAD/CONTIGENCIES/MOBILIZATION

Section XI includes costs for supervision of reclamation activities, profit and overhead, contingencies (unforeseen costs) and mobilization (the cost of moving equipment to and from the site). These costs are based on a percentage of the total direct costs which typically

decline as project size increases. Refer to Graph 1 and Graph 2 on page 8 to determine the percentage rate to be used.

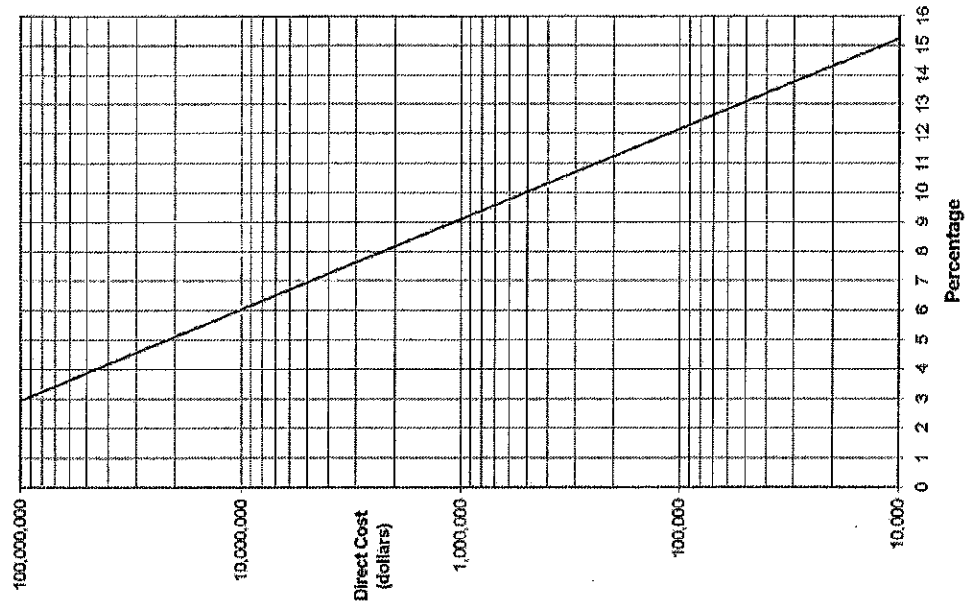
- A. Supervision - Supervision or reclamation management includes project inspection and supervision. These activities are usually performed by a consultant or staff member with experience in reclamation of disturbed lands. Reclamation management may include recommending change orders, verifying completed work, verifying compliance with project specifications, and other reclamation management oversight activities. Please refer to Graph No. 1 to determine the supervision cost factor.
- B. Profit and Overhead - Where it becomes necessary for the Lead Agency or the Department of Conservation to complete reclamation of the mining site, a third party will be retained to do the actual reclamation work. Because profit and overhead costs are not included in the reclamation cost sheets, these costs must be added to the total reclamation estimate. Please refer to Graph No. 2 to determine the profit and overhead cost factor.
- C. Contingencies - A contingency cost shall be included in the financial assurance estimate to provide for project uncertainties and unexpected natural events. This cost shall be added to the reclamation costs using the schedule below:

<u>Total Direct Cost (\$)</u>	<u>Contingency (%)</u>
0-\$499,999	10
\$500,000 – \$4,999,999	7
\$5 million - \$50 million	4
Greater than \$50 million	2

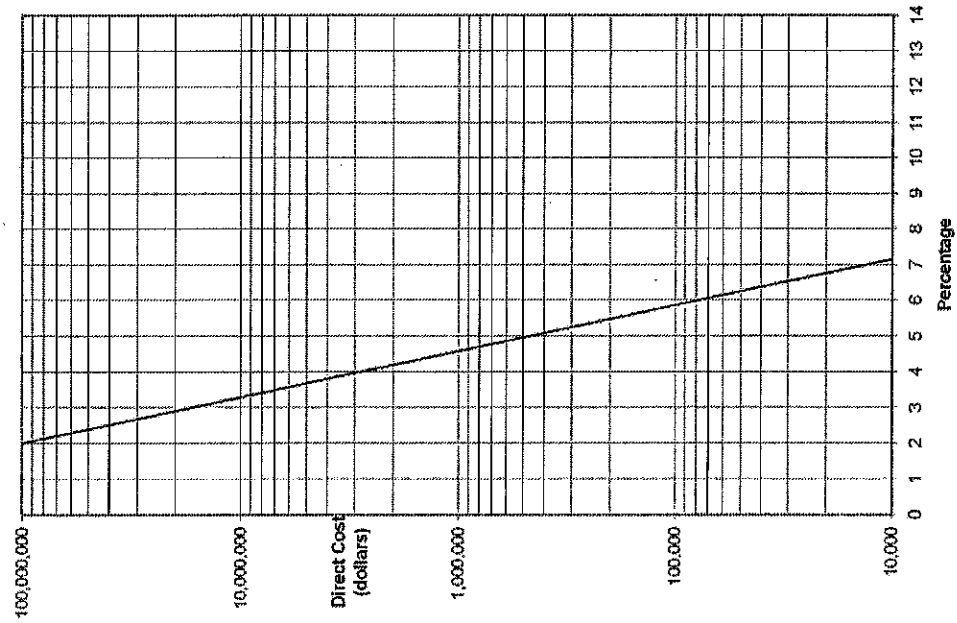
- D. Mobilization - Mobilization costs are attributed to moving equipment to the project site for reclamation purposes. These costs normally range between one and five percent of the total direct cost of the reclamation operations. These costs will vary depending upon the site location and the total value of the reclamation operations to be performed and may exceed five percent. Please insert the percentage used to estimate mobilization costs under Section X – Supervision/Profit & Overhead/Contingencies/Mobilization.
- E. Lead agencies shall include an administrative cost to draw on the financial assurance and implement the reclamation plan, should it become necessary. This cost shall, at a minimum, be added to the reclamation costs using the schedule below:

<u>Total Direct + Indirect Costs (\$)</u>	<u>Lead Agency Administrative Cost (%)</u>
0 – 99,999	15
100,000 – 499,999	12
500,000 – 999,999	10
1 million – 10 million	8
Greater than 10 million	5

Graph 2 -- Profit and Overhead



Graph 1 -- Reclamation Management



FINANCIAL ASSURANCE COST ESTIMATE
FOR

(Mine Name)

CA Mine ID # 91-_____

Reclamation Plan #/Name_____

Prepared by: (Name & Affiliation):

Date: _____

This financial assurance cost estimate prepared and submitted pursuant to (choose one):

A new or amended reclamation plan approved on (Date): _____

An annual mine inspection performed on (Date): _____

Most Recent Approved Financial Assurance Cost Estimate

Date: _____

Amount: \$ _____

Amount of existing Financial Assurance Mechanism (s)

Date: _____

Amount: \$ _____

I. SUPPORTING DOCUMENTS

This estimate represents the cost of conducting and completing reclamation in accordance with the Surface Mining and Reclamation Act (SMARA) and the following supporting documents:

Reclamation Plan Approval Date and Number

Documents made part of Reclamation Plan by Reference

Other Agency Financial Assurances Securing Reclamation of Disturbed Lands

Wage Rates used in Cost Estimate* *(cost estimates are required to use current 'General prevailing wage determinations made by the director of industrial relations' where applicable (<http://www.dir.ca.gov/OPRL/PWD/index.htm>) with employer labor burden added, or greater)*

Equipment Rates used in Cost Estimate* *(Use current 'Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)' equipment rates published by Caltrans (<http://www.dot.ca.gov/hq/construc/equipmnt.htm>) or other publicly available and verifiable local rates)*

Equipment Production Rates used in Cost Estimate *(Use of current Caterpillar Performance Handbook or equivalent published production rates is recommended)*

** Many mine sites are remote projects that require hours of travel (to and from) and sometimes require additional time to prepare for even the simplest of tasks. In accordance with Labor Code Sections 1773.1 and 1773.9, contractors are required to make travel and/or subsistence (per diem) payments to each worker to execute the work. These arrangements can be quite variable and site specific.*

Attachments:

V. PLANT STRUCTURES AND EQUIPMENT REMOVAL (cont.)

Methods to be used:

- A. Equipment – List equipment required to complete identified task (for large reclamation project sites or separate mine areas)

Equipment	\$/Unit	# of Units	Cost (\$)

Total Equipment Cost for this Task = \$ _____

- B. Labor – List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Units	Cost (\$)

Total Labor Cost for this Task = \$ _____

- C. Demolition – List all structures and equipment to be dismantled or demolished and removed from site

Structure/Equipment to be Removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost (\$)

Total Materials Cost for this Task = \$ _____

- D. Total Direct Cost of Structure and Equipment Removal (Sum of A+B+C)

Equipment Costs + Labor Cost + Demolition Cost = \$ _____

- E. Net Salvage Value* (Supported by properly prepared third party estimate, bid, or cost calculation.)

Net Salvage Value = \$ _____

- F. Total Cost of Structure and Equipment Removal (Subtract Line D from Line E)

Total Cost of Structure and Equipment Removal = \$ _____

*NOTE: Salvage value may only be used to offset the direct cost of removing the single item for which salvage value is being claimed. Salvage value shall not be used to offset any other demolition, general cleanup, or reclamation costs.

VI. PRIMARY RECLAMATION ACTIVITY (_____)

Describe Reclamation Activity Being Estimated

Use multiple sheets as necessary to estimate the cost of each activity required. Provide documentation showing that rates, prices, and wages are available locally to the lead agency and/or the Department if necessary.

Current Site Conditions:

Reclamation Plan Performance Standard (End Use):

Describe tasks, methods, equipment, etc.:

Decompaction, cut, fill, haul, slope reduction, compaction, grading, topsoil placement, drainage work, soil amendment, special requirements, etc. Separate sheets may be used for each task if necessary.

Provide quantities:

Overburden and topsoil, cut and fill, import or export (cubic yards), area (acres), haul distances (feet), equipment production rates (cubic yards/hour, or as applicable), etc.

VI. PRIMARY RECLAMATION ACTIVITY (_____) (Cont.)
Describe Reclamation Activity Being Estimated

Acres:		Overburden (cy):	
Haul Distance (ft):		Topsoil (cy):	
Production Rate (cy/hr):			

Methods to be used:

A. Equipment – List equipment required to complete identified task *(for large reclamation jobs separate mine areas)*

Equipment	\$/Unit	# of Units	Cost (\$)

Total Equipment Cost for this Task = \$ _____

B. Labor – List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Unit	Cost (\$)

Total Labor Cost for this Task = \$ _____

C. Materials – List all materials required to complete identified task

Item	Quantity	\$/unit (incl sales tax)	Cost (\$)

Total Materials Cost for this Task = \$ _____

D. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost = \$ _____

VII. REVEGETATION *(use multiple sheets as needed)*

Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

Current Site Condition:

Reclamation Plan Performance Standard (End Use):

Describe tasks:

VII. REVEGETATION (Cont.)

Methods to be used:

- A. Equipment – List equipment required to complete identified task. For large reclamation jobs separate mine areas.

Equipment	\$/Unit	# of Units	Cost (\$)

Total Equipment Cost for this Task = \$ _____

- B. Labor – List all labor categories to complete identified task.

Labor Category	\$/Unit (incl labor burden)	# of Unit	Cost (\$)

Total Labor Cost for this Task = \$ _____

- C. Materials – List all materials required to complete identified task

Item/Plant Species	Unit of measure	Quantity	\$/unit (incl sales tax)	Cost (\$)

Total Materials Cost for this Task = \$ _____

- D. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost = \$ _____

VIII. MISCELLANEOUS COSTS *(use multiple sheets as needed)*

Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

Examples of this type of cost may include temporary storage of equipment and materials off site, special one-time permits (i.e. transportation permits for extra wide overweight loads, etc.), decommissioning a process mill (i.e. decontamination of equipment), disposal of warehouse inventories, well abandonment, remediation of fueling and waste oil storage sites, septic system removal, costs to prepare closure and monitoring reports, site security, preserving potable water and maintaining utilities, etc.

Item / Task	Quantity	\$/Unit	Cost (\$)

Total Miscellaneous Costs = \$ _____

IX. MONITORING COSTS

Monitoring Task	\$/Visit	# Visits/Year	# of Monitoring Years	Cost (\$)

Total Monitoring Costs = \$ _____

X. SUMMARY OF COSTS

This section shall be used to summarize all the cost sheets in one place.

(V) Total of all Plant Structures & Equipment Removal Costs	\$
(VI) Total of all Primary Reclamation Activities Costs	\$
(VII) Total of all Revegetation Costs	\$
(VIII) Total of all Miscellaneous Costs	\$
(IX) Total of all Monitoring Costs	\$ _____
Total of Direct Costs	\$

XI. Supervision / Profit & Overhead / Contingencies / Mobilization

(A) Supervision (_____ %)	\$
(B) Profit/Overhead (_____ %)	\$
(C) Contingencies (_____ %)	\$
(D) Mobilization (_____ %)	\$ _____
Total of Indirect Costs	\$
Total of Direct and Indirect Costs	\$
(E) Lead Agency and/or Dept. of Conservation Administrative Costs	\$ _____
Total Estimated Cost of Reclamation	\$ _____

