

# **Appendix 1**

## Conformance Demonstration Matrix

**CONFORMANCE DEMONSTRATION MATRIX  
BETWEEN THE AMENDED RECLAMATION PLAN  
and the  
SURFACE MINING AND RECLAMATION ACT OF 1975 (SMARA) AND STATE MINING AND GEOLOGY BOARD  
RECLAMATION REGULATIONS (CCR TITLE 14)**

**With Specific Emphasis on:**

ARTICLE 1. GENERAL PROVISIONS. SECTION 2710 et seq.  
ARTICLE 2. DEFINITIONS. SECTION 2725 et seq.  
ARTICLE 3. DISTRICT COMMITTEES. SECTION 2740 - 2741.  
ARTICLE 4. STATE POLICY FOR THE RECLAMATION OF MINED LANDS. SECTION 2755 et seq.  
ARTICLE 5. RECLAMATION PLANS AND THE CONDUCT OF SURFACE MINING OPERATIONS. SECTION 2770 et seq., as amended  
CCR TITLE 14 (REGISTER 85, NO. 18-5-4-85)  
CHAPTER 8. MINING AND GEOLOGY  
SUBCHAPTER 1. STATE MINING AND GEOLOGY BOARD  
ARTICLE 1. SURFACE MINING AND RECLAMATION PRACTICE. SECTION 3500 et seq.  
ARTICLE 9. RECLAMATION STANDARDS. SECTION 3700 et seq.

SMARA/CCR SECTION	DESCRIPTION	N/A	DOCUMENT	PAGE	SECTION
<b>MINING OPERATION AND CLOSURE</b>					
SMARA 2770.5	100-year flood, Caltrans contact.	NA			
SMARA 2772 (c) (1)	Name and address of operator/agent.			18	1.4
SMARA 2772 (c) (2)	Quantity & type of minerals to mined.			7, 57, 61	ES-5, 3.2, 3.3, 3.4, 3.8
SMARA 2772 (c) (3)	Initiation and termination date.			7, 58	ES-5, 3.4
SMARA 2772 (c) (4)	Maximum anticipated depth of mining.			88	3.10
SMARA 2772 (c) (5)	Description, including map with boundaries, topographic details, geology, streams, roads, utilities.			22, 24-43, 61, 80, 90	1.6, 2.1-2.6, 3.8, 3.9, 3.12
SMARA 2772 (c) (6)	Mining plan and time schedule for reclamation (concurrent or phased reclamation).			57, 58, 61, 61	3.1, 3.5, 3.7, 3.8, 3.8.1, 3.8.2
SMARA 2772 (c) (9)	Impact of reclamation on future mining.			102	4.3
SMARA 2772 (c)(10)	Applicant statement accepting responsibility for reclamation per the reclamation plan.			113	5.2
SMARA 2773.1	Performance (financial) assurances.			112	4.7
CCR 3502 (b) (2)	Public health and safety (exposure).			105	4.5.6
CCR 3713 (b)	All portals, shafts, tunnels, or openings, gated or protected from public entry, but preserve access for wildlife.	NA			
CCR 3502 (b) (5)	Disposition of old equipment.			103	4.5.3

SMARA/CCR SECTION	DESCRIPTION	N/A	DOCUMENT	PAGE	SECTION
CCR 3709 (a)	Equipment stored in designated area and waste disposed of according to ordinance.			102, 103	4.4, 4.5.3, 4.5.4
CCR 3709 (b)	Structures and equipment dismantled and removed.			103	4.5.3
CCR 3713 (a)	Drill holes, water wells, monitoring wells abandoned in accordance with laws.	NA			
<b>END LAND USES</b>					
SMARA 2772 (c) (7)	Proposed subsequent use.			11, 94	1.1.1, 4.1
CCR 3704 (e)	Final landforms conform with surrounding topography or end use.			61, 73, 80, 95, 104	3.8.1, 3.8.2, 3.9, 4.2, 4.5.5
CCR 3707 (a)	Return prime ag to prime ag, unless exempted.	NA			
CCR 3707 (c)	Productivity rates equal pre-project or similar site for two consecutive years. Rates set forth in plan.	NA			
CCR 3708	Other ag capable of sustaining crops of area.	NA			
SMARA 2772 (c) (8)	Description of reclamation measures adequate for proposed end use.			95, 102, 102-111	4.2, 4.4, 4.5.1-4.5.8
CCR 3706 (a)	Mining and reclamation to protect downstream beneficial uses.			37, 88, 102, 103	2.5.5, 3.11, 4.5.1, 4.5.2
<b>GEOTECHNICAL REQUIREMENTS</b>					
CCR 3502 (b) (3)	Slopes: critical gradient, consider physical properties and landscaping.			58, 61, 80, 95, 104, 105	3.5.1, 3.8, 3.9, 4.2, 4.5.5, 4.5.7
CCR 3704 (f)	Cut slopes have minimum factor of safety for end use and conform with surrounding topography.			50, 64, 90	3.5.1, 3.9, 4.5.5
CCR 3502 (b) (4)	Fill Materials in conformance with current engineering practice.			50, 64, 90	3.5.1, 3.9, 4.5.5
CCR 3704 (a)	For urban use, fill compacted in accordance with UBC or local grading ordinance.	NA			
CCR 3704 (b)	For resource conservation, compact to standard for that end use.	NA			
CCR 3704 (d)	Final reclamation fill slopes not exceed 2:1, except when engineering and revegetation analysis allow.			58, 90, 104	3.5.1, 3.9, 4.5.5
CCR 3704 (e)	Final landforms or fills conform with surrounding topography or end use.			61, 73, 80, 95, 104	3.8.1, 3.8.2, 3.9, 4.2, 4.5.5
<b>HYDROLOGY AND WATER QUALITY</b>					
CCR 3710 (a)	Surface and groundwater protected in accordance with Porter-Cologne and Clean Water Acts (RWQCB/SWRCB).			9, 16, 37, 37, 88, 102, 103	ES-6, 1.3.1, 2.5.5, 2.5.6, 3.11, 4.5.1, 4.5.2
CCR 3706 (b)	Water quality, recharge, and groundwater storage shall not be diminished, except as allowed by plan.			16, 37, 37, 88, 102, 103	1.3.1, 2.5.5, 2.5.6, 3.11, 4.5.1, 4.5.2

SMARA/CCR SECTION	DESCRIPTION	N/A	DOCUMENT	PAGE	SECTION
CCR 3503 (b) (2)	Prevent siltation of groundwater recharge areas.			16, 37, 88, 102, 103	1.3.1, 2.5.6, 3.11, 4.5.1, 4.5.2
SMARA 2773 (a)	Water quality monitoring plan specific to property.			9, 16, 88, 103	ES-6, 1.3.1, 3.11, 4.5.2
CCR 3503 (e)	Erosion and drainage (grading to drain to natural courses or interior basins).			9, 88, 102, 105	ES-6, 3.11, 4.5.1, 4.5.7
SMARA 2772(c)(8)(b)	Rehabilitation of streambanks/beds to minimize erosion.	NA			
CCR 3502 (b) (6)	Temporary stream and water diversions shown.	NA			
CCR 3503 (a) (3)	Erosion control facilities (dikes, ditches, etc.) as necessary.			88, 102	3.11, 4.5.1
CCR 3706 (c)	Erosion and sedimentation controlled during all phases as per RWQCB/SWRCB.			37, 40, 88, 102, 103	2.5.5, 2.5.6, 3.11, 4.5.1, 4.5.2
CCR 3503 (b) (1)	Settling ponds (sedimentation and water quality).			9, 40, 88, 102	ES-6, 2.5.5, 3.11, 4.5.1
CCR 3706 (d)	Surface runoff and drainage controlled and methods designed for not less than 20 year/1 hour intensity storm event.			40, 88, 102, 103	2.5.5, 3.11, 4.5.1, 4.5.2
CCR 3706 (e)	Altered drainages shall not cause increased erosion or sedimentation.			88, 102, 105	3.11, 4.5.1, 4.5.7
SMARA 2773 (a)	Sediment and erosion control monitoring plan specific to property.			37, 88, 102	2.5.5, 3.11, 4.5
CCR 3503 (d)	Disposal of mine waste and overburden (stable--no natural drainage restrictions without suitable provisions for diversion).			102, 103	4.4, 4.5.3, 4.5.4
SMARA 2772(c)(8)(a)	Description of contaminant control and mine waste disposal.			102, 103	4.4, 4.5.3, 4.5.4
CCR 3503 (a) (2)	Overburden stockpiles managed to minimize water and wind erosion.			103	4.5.4
CCR 3704 (g)	Piles or dumps not placed in wetlands without mitigation.	NA			
CCR 3711 (e)	Topsoil redistributed in stable site and consistent thickness.	NA			
CCR 3712	Waste and tailings, and waste disposal governed by SWRCB (Article 7, Chapter 15, Title 23, CCR).	NA			
CCR 3710 (b)	In-stream in accordance with DFG 1600, EPA 404, and Sec. 10 Rivers and Harbors.	NA			
CCR 3710 (c)	In-stream channel elevations and bank erosion evaluated annually using extraction quantities, cross-sections, aerial photos.	NA			
CCR 3706 (f)	Stream diversions constructed in accordance with DFG 1603, EPA 404, Sec. 10 Rivers and Harbors.	NA			
CCR 3706 (g)	All temporary diversions eventually removed.	NA			

SMARA/CCR SECTION	DESCRIPTION	N/A	DOCUMENT	PAGE	SECTION
<b>ENVIRONMENTAL SETTING AND PROTECTION OF FISH AND WILDLIFE HABITAT</b>					
CCR 3502 (b) (1)	Environmental setting and impact of reclamation on surrounding land uses. (Identify sensitive species, wildlife habitat, sensitive natural communities, e.g., wetlands, riparian zones, etc.)			32, 94	2.5 (ALL), 4.1
CCR 3705 a)	Vegetative cover, suitable to end use, self-sustaining. Baseline studies documenting cover, density and species richness.			105	4.5.6
CCR 3503 (c)	Protection of fish and wildlife habitat (all reasonable measures).			16, 37, 95	1.3.1, 2.5.5, 4.2
CCR 3703 (a)	Sensitive species conserved or mitigated.	NA			
CCR 3703 (b)	Wildlife habitat at least as good as pre-project, if approved end use is habitat.			88, 105, 111	3.11, 4.5.7, 4.5.8
CCR 3703 (c)	Wetlands avoided or mitigated at 1:1 minimum.			102, 103	4.5.1, 4.5.2
CCR 3706 (a)	Mining and reclamation to protect downstream beneficial uses.			88, 102, 103	3.11, 4.5.1, 4.5.2
CCR 3706 (f)	Stream diversions constructed in accordance with DFG 1603, EPA 404, Sec. 10 Rivers and Harbors.	NA			
CCR 3710 (a)	Surface and groundwater protected.			9, 16, 37, 40, 88, 102, 103	ES-6, 1.3.1, 2.5.5, 2.5.6, 3.11, 4.5.1, 4.5.2
<b>RESOILING AND REVEGETATION</b>					
CCR 3503 (f)	Resoiling (fine material on top plus mulches).			103, 105	4.5.4, 4.5.7
CCR 3704 (c)	Mine waste stockpiled to facilitate phased reclamation and separate from growth media.			103	4.5.4
CCR 3711 (a)	All salvageable topsoil removed. Topsoil and vegetation removal not process mining by more than one year.	NA			
CCR 3711 (b)	Topsoil resources mapped prior to stripping, location of stockpiles on map. Topsoil and growth media in separate stockpiles.	NA			
CCR 3711 (c)	Soil salvage and phases set forth in plan, minimize disturbance, designed to achieve revegetation success.	NA			
CCR 3707 (b)	Segregate and replace topsoil by horizon.	NA			
CCR 3711 (d)	Topsoiling phased ASAP. Stockpiles not be disturbed until needed. Stockpiles clearly identified and planted with vegetation or otherwise protected.	NA			
CCR 3705 (d)	Roads stripped of roadbase materials, resoiled and revegetated, unless exempted.			105	4.5.7
CCR 3705 (e)	Soil altered or other than native topsoil, required soil analysis. Amend if necessary.			105	4.5.7
CCR 3707 (d)	Fertilizers and amendments not contaminate water.	NA			
CCR 3503 (g)	Revegetation and plant survival (use available research).			105	4.5.7

<b>SMARA/CCR SECTION</b>	<b>DESCRIPTION</b>	<b>N/A</b>	<b>DOCUMENT</b>	<b>PAGE</b>	<b>SECTION</b>
CCR 3503 (a) (1)	Removal of vegetation and overburden preceding mining kept to a minimum.			105	4.5.7
SMARA 2773(a)	Revegetation plan specific to property. Monitoring plan.			105	4.5.7
CCR 3705(b)	Test plots if success has not been proven previously.			105	4.5.7
CCR 3705(c)	Decompaction of site.			105	4.5.7
CCR 3705(f)	Temporary access not bladed. Barriers installed.			105	4.5.7
CCR 3705(g)	Use native plant species, unless exotic species meet end use.			105	4.5.7
CCR 3705(h)	Plant during correct season.			105	4.5.7
CCR 3705(i)	Erosion control and irrigation, when necessary.			105	4.5.7
CCR 3705(j)	If irrigated, demonstrate self-sustaining without for two-year minimum.			105	4.5.7
CCR 3705(k)	Weeds managed.			105	4.5.7
CCR 3705(l)	Plant protection measures, fencing, caging.	NA		105	
CCR 3705(m)	Success quantified by cover, density and species-richness. Standards proposed in plan. Sample method set forth in plan and sample size provide 80 percent confidence level, as minimum.			105	4.5.7
SMARA 2777	Amended reclamation plans required prior to substantial deviations to approved plans.			5	ES-3