Conditional Waiver No. 8 – Discharges/Disposal of Solid Wastes to Land

Conditional Waiver No. 8 is for discharges of solid wastes to land, which may be a source of pollutants that can adversely affect the quality of waters of the state.

The following types of discharge not regulated or authorized under WDRs may be eligible for Conditional Waiver No. 8:

- Discharges of plant crop residues to land
- Discharge/application of amendments and/or mulches to soil
- Discharges/disposal of inert wastes to solid waste disposal facilities only accepting inert wastes
- Discharges of soils containing wastes to temporary waste piles
- Discharges/disposal/reuse of soils characterized as inert from known contaminated sites to land

Discharges from these types of projects have similar properties, potential threat to water quality, and waiver conditions. Therefore, discharges from all these types of projects were grouped into one discharge classification. Discharges that comply with the waiver conditions are not expected to pose a threat to the quality of waters of the state.

Solid wastes that are discharged to land may contain bacteria, nutrients, pesticides, heavy metals, and other pollutants. Storm water and surface runoff that is allowed to come into contact with solid wastes can leach these pollutants into soil and underlying groundwater. Additionally, solid wastes are significant sources of sediment that may be transported to surface waters by wind or in storm water or surface runoff. However, with proper management, discharges of solid wastes to land are not expected to pose a threat to the quality of waters of the state. Therefore, waiver conditions must require proper management of solid wastes discharged to land to minimize or eliminate the discharge of pollutants to waters of the state.

Waiver conditions should be developed in order for members of the public, cities, counties, local agencies and organizations, and/or the San Diego Water Board to determine if any discharges or disposal of solid wastes to lands pose a threat to the quality of the waters of the state. If dischargers of solid wastes are not in compliance with waiver conditions, they can be issued a Notice of Violation and required to correct deficiencies in order to continue being waived under Conditional Waiver No. 8. If dischargers of solid wastes violate waiver conditions, the San Diego Water Board can terminate the conditional waiver for the discharge and begin regulating the discharge with individual WDRs and/or take other enforcement actions.

Conditional Waiver No. 8 only applies to discharges/disposal of solid wastes to land within the San Diego Region. Discharges/disposal of solid wastes to lands outside of the San Diego Region must comply with conditional waivers and/or WDRs issued by the appropriate Regional Water Board.

In order to be eligible for Conditional Waiver No. 8, discharges must comply with certain conditions to be protective of water quality. The waiver conditions applicable to discharges of solid wastes to land include the following:

- 8.I.A. General Waiver Conditions for Discharges of Solid Wastes to Land
- 8.II.A. Specific Waiver Conditions for Discharges of Plant Crop Residues to Land
- 8.II.B. Specific Waiver Conditions for Application of Amendments and Mulches to Soil
- 8.II.C. Specific Waiver Conditions for the Discharge of Soils Containing Wastes to Temporary Waste Piles
- 8.II.D. Specific Waiver Conditions for Discharges of Inert Wastes to Solid Waste Disposal Facilities Only Accepting Inert Wastes
- 8.II.E. Specific Waiver Conditions for the Discharge/Disposal/Reuse of Inert Soils and Materials from Contaminated Sites to Land

Discharges of solid wastes to land that comply with the general and specific waiver conditions in Conditional Waiver No. 8 are not expected to pose a threat to the quality of waters of the state.

8.I.A. General Waiver Conditions for Discharges of Solid Wastes to Land

- 1. Prevent the direct or indirect discharge of solid wastes to any surface waters of the state (including ephemeral streams and vernal pools).
- 2. Operations or facilities that accept and/or discharge solid wastes to land must comply with local, state, and federal ordinances and regulations and obtain any required permits, certifications, and/or licenses.
- 3. Solid wastes must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
- 4. The discharger must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.
- 5. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
- 6. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

8.II.A. Specific Waiver Conditions for Discharges of Plant Crop Residues to Land

- 1. Plant crop residues must be managed to prevent transport of pollutants to waters of the state.
- 2. Plant crop residues may be used as feedstock for composting.
- 3. Plant crop residues cannot be burned and applied to land.
- 4. Application of any products (e.g., fertilizers, pesticides) to plants or soil must be used in accordance with manufacturer's guidelines and must not have an adverse effect on the quality of any waters of the state.
- 5. Concentrations of pesticides and/or herbicides or any other pollutants associated with the plant crop residues must not adversely affect the quality or beneficial uses of underlying groundwater.

6. Implement management measures (MMs) and/or best management practices (BMPs) around areas where plant crop residues have been discharged to land to minimize or eliminate runoff and leachate to surface waters and groundwater.

8.II.B. Specific Waiver Conditions for Application of Amendments and Mulches to Soil

- Amendments or mulches applied to soil cannot include any of the following additives, unless sufficient information is provided to demonstrate that the waste does not pose a potential threat to water quality: (a) municipal solid wastes; (b) sludges, including sewage sludge, water treatment sludge, and industrial sludge; (c) septage; (d) liquid wastes; (e) oil and grease; and (f) hazardous, designated, and any other wastes determined by the San Diego Water Board to pose a potential threat to water quality.
- 2. The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be transported off the property in storm water runoff during the rainy season. Resources are available from the Natural Resource Conservation Service (NRCS), University of California Cooperative Extension (UCCE), and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.
- 3. Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).
- 4. Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

8.II.C. Specific Waiver Conditions for the Discharge of Soils Containing Wastes to Temporary Waste Piles

- 1. For *any soils containing wastes* temporarily stored in waste piles, the following conditions apply:
 - a) The discharger must submit a signed/completed Section A of the Temporary Waste Pile Certification form within 30 days of the initial discharge of any waste piles to be eligible for this waiver. The property owner must approve and acknowledge the placement of the waste at the site.
 - b) The discharger must submit a signed/completed Section B of the Temporary Waste Pile Certification form within 10 working days of completing removal of all waste and restoring the site to its original condition.
 - c) Unless otherwise specified in the applicable conditions, no temporary waste piles may remain on a site for longer than 6 months or 180 days.
 - d) The temporary discharge of waste must not (a) cause the occurrence of coliform or pathogenic organisms in waters pumped from the basin; (b)

cause the occurrence of objectionable tastes and odors in water pumped from basin; (c) cause waters pumped from the basin to foam; (d) cause the presence of toxic materials in waters pumped from the basin; (e) cause the pH of waters pumped from the basin to fall below 6.0 or rise above 9.0; (f) cause pollution, contamination or nuisance or adversely affect the quality or beneficial uses of groundwater or surface waters of the hydrologic subareas established in the Basin Plan; and/or, (g) cause a violation of any discharge prohibitions in the Basin Plan for the San Diego Region.

- e) The discharger must conduct regular inspections of temporary waste piles and associated MMs/BMPs at least once per week. Corrective actions must be taken as necessary to ensure compliance with the conditions of this waiver.
- f) Surface drainage must be diverted away from the temporary waste piles. For all temporary waste piles, the discharger must implement effective MMs/BMPs to prevent surface water runon and runoff from contacting wastes and to prevent erosion and transport of wastes by surface runoff.
- g) Temporary waste piles must be placed at least 5 feet above the highest historically known or anticipated level of groundwater, and more than 100 feet from any surface water of the state, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.
- h) Temporary waste piles must be protected against 100-year peak stream flows as defined by the County flood control agency.
- Temporary waste piles must be covered by plastic sheeting (not less than 10 mils thick, unless otherwise specified under the applicable Special Conditions) to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances.
- j) Temporary waste piles must be underlain by either plastic sheeting (not less than 10 mils thick, unless otherwise specified under the applicable conditions) or a liner of low permeability that will prevent leachate from infiltrating to groundwater.
- k) Solid wastes discharged to temporary waste piles, together with any containment materials used at the temporary waste pile, and any underlying geologic materials impacted by the discharge, shall be removed within 180 days, unless otherwise specified under the applicable Special Conditions. Subsequently, the discharger must remove all wastes, treatment facilities, related equipment, and dispose of those items in accordance with applicable regulations. The site must be restored to its original state within 30 days after the temporary waste pile is removed, unless otherwise specified under the applicable Special Conditions.
- The discharger must post at least one clearly visible sign listing the following minimum information: a) project name, b) name and address of discharger, c) brief project description, and d) 24-hour contact information – name, address, facsimile, and telephone number for the project for as long as the temporary waste pile remains on the site.

- 2. For *soils containing petroleum hydrocarbons* temporarily stored in waste piles, the following conditions apply:
 - a) Soils and associated solid waste containing petroleum hydrocarbons discharged into temporary waste piles shall be limited to a maximum time period of 3 months or 90 days on a site.
 - b) Soils and associated solid waste containing petroleum hydrocarbons discharged into temporary waste piles under an initial certification report must be derived from only one source (e.g., one unauthorized release site).
 - c) Temporary waste piles must be covered by plastic sheeting (not less than 10 mils thick) to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances.
 - d) Temporary waste piles must be underlain by either plastic sheeting (not less than 10 mils thick) or a liner of low permeability that will prevent leachate from infiltrating to groundwater.
 - e) In addition to the conditions stated herein, temporary waste piles must conform to applicable provisions in the state's local oversight program (LOP) for Orange, Riverside, or San Diego Counties.
 - f) The site must be restored to its original state within 30 days after removal of the temporary waste pile from the site.
- 3. For *dredged spoils containing heavy metals* temporarily stored in waste piles, the following conditions apply:
 - a) Dredged spoils and associated solid waste containing heavy metals discharged into temporary waste piles shall be limited to a maximum time period of 9 months or 270 days on a site.
 - b) Temporary waste piles must be covered by either a plastic sheeting to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances. Alternative control methods may be utilized if sufficient information is provided to demonstrate that the proposed alternative is protective of water quality and human health.
 - c) Temporary waste piles must be underlain by plastic sheeting (not less than 20 mils thick) or a liner of lower permeability that will prevent leachate from infiltrating to groundwater. Sufficient information must be provided to the San Diego Water Board demonstrating that the liner and containment facility has been designed to contain all solid wastes and fluids.
 - d) Materials used in containment structures must have the appropriate chemical and physical properties to ensure that such structures do not fail to contain waste because of: the stress of installation, pressure gradients, physical contact with the waste or leachate, or chemical reactions with soil and rock.
 - e) The site must be restored to its original state within 60 days after removal of the temporary waste pile from the site.

8.II.D. Specific Waiver Conditions for Solid Waste Disposal Facilities Accepting Only Inert Wastes¹

- 1. Inert solid waste must not contain hazardous waste, or soluble or decomposable constituents to be considered inert waste.
- 2. Inert waste cannot contain any "free liquids."²
- 3. Owner/operator of disposal facility must secure the disposal site and prevent unauthorized disposal by the public.
- 4. Inert wastes exclude any wastes determined by the San Diego Water Board to potentially have an adverse affect on the quality or beneficial uses of waters of the state, even if classified as inert waste.

8.II.E. Specific Waiver Conditions for the Discharge/Reuse of Inert Soils and Materials from Contaminated Sites

- 1. For *all waste soils characterized as inert (Tier 1 or Tier 2)*, the following conditions apply:
 - a) Inert waste soils from known contaminated sites cannot be transported off site and discharged/disposed/reused directly or indirectly to any surface waters of the state (including ephemeral streams and vernal pools).
 - b) Inert waste soils from known contaminated sites cannot contain significant quantities of decomposable waste.
 - c) Inert waste soils from known contaminated sites cannot contain any "free liquids."³
 - d) Inert waste soils that are discharged/disposed/reused at any site cannot have any hydrocarbon, chlorinated solvent, or other contaminant-based odor.
 - e) Sites that export or import soils characterized as inert from known contaminated sites for use as fill material or any other purpose must comply with an applicable federal, state, or local permitting requirements, regulations, and/or ordinances pertaining to the use of imported soil.
 - f) Sites that export or import soils characterized as inert from known contaminated sites for use as fill material or any other purpose must implement MMs/BMPs to eliminate the potential for erosion and transport of sediment off the site.
 - g) This conditional waiver does not authorize the discharge/disposal/reuse of soil characterized as inert from known contaminated sites outside the boundaries of the San Diego Region.
 - h) Prior to exporting soil characterized as inert from a known contaminated site, the owner/operator of the export site must file a Notice of Intent with the San Diego Water Board. The Notice of Intent must be filed no less than 3 days prior to the beginning of export shipments. The Notice of

¹ According to California Code of Regulations Title 27 section 20230(a) "Inert waste" is defined as "that subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste."

 ² "Free liquids" defined by California Code of Regulations Title 27 section 20164 as "liquid which readily separates from the solid portions of waste under ambient temperature and pressure."
³ "Ibid.

Intent must include information about the site owner/operator, map of the site showing the locations of excavations, borings and/or stockpiles, MMs/BMPs that will be taken to prevent discharges of waste soil that could affect surface water and groundwater quality, estimated volumes (can be a range of volumes) of inert waste soil that will be generated for use off the site, estimated number (can be a range) and locations of samples that will be collected for characterization, and name of the certified environmental analytical laboratory that will perform the analysis.

- Waste soils from a site with a known or discovered unauthorized release must be characterized and certified as inert in order for the soil to be reused off site. Characterization and certification must include the following minimum requirements:
 - All waste soils generated during remediation or corrective action must be stockpiled on the site in accordance with the waiver conditions for the discharge of specified soils containing wastes to temporary waste piles. Or, waste soils may be sampled and characterized in-situ prior to transport and disposal or reuse off site
 - b) Waste soil must be segregated into 2 categories:
 - a. Soil that is impacted by the unauthorized release must be characterized as hazardous, designated, and/or non-hazardous waste and handled in accordance with regulatory requirements for the disposal of solid wastes. Waste soils that do not visually appear impacted, but smells impacted, must be treated as impacted soil and cannot be characterized as inert.
 - b. Soil that does not appear to be impacted by the unauthorized release, by visual inspection and odor, must be sampled and analyzed to confirm the soil can be characterized as inert waste soil.
 - c) Samples must be collected from the waste soil suspected to be inert for laboratory analysis. The minimum number is samples required to characterize the soil is as follows:

Volume of Soil	Required Number of Samples Analyzed
0 to <500 cy	4 samples per 100 cy (12 minimum)
500 to <5,000 cy	1 additional sample per additional 500 cy
5,000 cy or more	1 additional sample per additional 1,000 cy ⁴
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cy = cubic yards

 d) Samples must be analyzed by a state-certified analytical laboratory using USEPA approved analytical methods for the following constituents:

⁴ Volumes greater than 10,000 cubic yards may rely on fewer samples than 1 per each additional 1,000 cubic yards if characterization complies with SW846 methods for selecting appropriate numbers of samples for waste characterization and statistical analyses. The appropriate number of samples is the least number of samples required to generate a sufficiently representative estimate of the true mean concentration of a chemical contaminant of a waste.

- a. Total concentrations of those Title 22 metals identified as contaminants of concern for the export site. For sites identified with burn ash (i.e., a site where solid waste has been burned at low temperature and the residual burn ash pits and burn ash layers are present in soil), the site shall be investigated and the burn ash will be characterized for disposal purposes according to the protocol established by the lead regulatory agency (e.g., Department of Toxic Substances Control, California Integrated Waste Management Board, or others) to identify contaminants of concern at the site. The soil outside of the area of impact of the burn ash shall be tested for the total concentration of those metals identified as contaminants of concern based on the findings of the burn ash investigation technical study.
- b. Total petroleum hydrocarbons (by USEPA Method 8015 full scan if export site includes oil or fuel as potential or actual contaminants of concern)
- c. Polychlorinated biphenyls (if export site includes PCBs as potential or actual contaminants of concern)
- d. Volatile and semi-volatile organic compounds (if export site includes volatile and semi-volatile organic compounds as potential or actual contaminants of concern)
- e. Pesticides (if export site includes a known agricultural area, or pesticides as potential or actual contaminants of concern)
- f. Other constituents (if contaminated portion of the export site is found to contain other pollutants or contaminants)
- j) If analytical results indicate detectable concentrations of constituents other than Title 22 metals, waste soil cannot be characterized as inert.
- 2. For reuse of *Tier 1 inert waste soils (full unrestricted reuse within the San Diego Region)*, the following conditions apply:
 - a) Soil cannot contain any detectable concentrations of contaminants other than Title 22 metals.
 - b) For those Title 22 metals that have been identified as contaminants of concern for the export Site, samples shall be analyzed by an SW846 method using the reporting limits set forth in the Table provided in Attachment 1. From these data, the 90 percent upper confidence level (UCL) shall be determined. Prior to calculating the 90 percent UCL, one must determine whether the sample set is normally, lognormally or non-normally distributed. If lognormally distributed, one must determine the 90 percent UCL on the lognormal mean. If non-normally distributed, but sufficiently symmetrical, calculate the 90 percent UCL on the median (50th percentile), instead of the mean. See USEPA SW846 Chapter 9 and the USEPA Guidance for Data Quality Assessment for a discussion of waste characterization and statistical analysis; in particular the guidance on

testing for normality, calculating a 90 percent UCL, and handling of non-detected values. $^{\rm 5}$

Title 22	Inert Waste	Residential		Background ^d	Tier 1
Metals	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Antimony	6.0	30	5.0	0.60	5.0
Arsenic	50	0.07	9.9	3.5	3.5
Barium	1,000	5,200	283	509	509
Beryllium	4.0	150	10	1.28	4.0
Cadmium	5.0	1.7	4.0	0.36	1.7
Chromium, Total	50	NA	0.4	122	50
Chromium, Hexavalent	50	17	NA	NA	17
Cobalt	NA	660	20	14.9	20
Copper	1,300	3,000	60	28.7	60
Lead	15	150	40.5	23.9	15
Mercury	2.0	18	0.00051	0.26	0.26
Molybdenum	NA	380	2.0	1.3	2.0
Nickel	100	1,600	30	57	57
Selenium	50	380	0.21	0.058	0.21
Silver	NA	380	2.0	0.80	2.0
Thallium	2.0	5.0	1.0	0.56	1.0
Vanadium	50	530	2.0	112	50
Zinc	NA	23,000	8.5	149	149

Tier 1 Soil Screening Levels

a. Calculated using Central Valley Water Board Designated Level Methodology, where the Water Quality Goal is the lower value of the Federal or State drinking water primary maximum contaminant level, the Environmental Attenuation Factor is 10, and the Leachability Factor is 100.

b. Values taken from the California Environmental Protection Agency's Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties (CalEPA 2005).

c. Taken from Oak Ridge National Laboratory's *Preliminary Remediation Goals for Ecological Endpoints* (Efroymson, et al 1997)

d. Taken from Kearney Foundation of Soil Science Division of Agriculture and Natural Resources, University of California Background Concentrations of Trace and Major Elements in California Soil – Special Report (Bradford, et al 1996).

e. Tier 1 Soll Screening Level for inert waste soils that can be reused without restriction. Tier I SSLs selected based on the following steps: Step 1) Select lower value of Residential CHHSL or e-PRG; Step 2) Select lower value of Step 1 or Inert Waste Target; and, Step 3) Select higher value of Step 2 and Arithmetic Mean Background.

f. These values are not intended to provide clean up levels for soil remaining on-site. Such values should be established based on the contaminants of concern, the site use, and in conjunction with the regulatory agency providing oversight for the remediation effort.

- c) An Inert Waste Certification must be filed with the San Diego Water Board by the owner/operator of the export site within 30 days following completion of export activities. The Inert Waste Certification must include the following information:
 - i) Generator name and contact information

⁵ See U.S. Environmental Protection Agency, Office of Solid Waste. 1986. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods;*

http://www.epa.gov/epaoswer/hazwaste/test/pdfs/chap9.pdf; and USEPA 2002, RCRA Waste Sampling Draft Technical Guidance, EPA 530-D-02-002 (Appendix F). Office of Solid Waste.

- ii) Export site location, owner name and contact information
- iii) Map of the export site showing the location of the excavation, borings, stockpiles, and/or samples collected
- iv) Approximate volume of inert waste soil exported from the site
- v) Description of BMPs implemented to prevent discharge of waste soil off the export site during excavation and transport.
- vi) Laboratory analytical data, including number of samples collected, EPA approved analytical methods used, the 90 percent UCL of the data for the contaminants of concern, and name of certified environmental analytical laboratory that performed the analysis.
- vii) The export site owner, principal executive officer, or authorized representative, and a California registered professional engineer or geologist must sign and certify the Inert Waste Certification. The Inert Waste Certification must include the statement, "*I certify under penalty* of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."
- 3. For reuse of *Tier 2 inert waste soils (only for commercial or industrial development purposes within the San Diego Region)*, the following conditions apply:
 - a) Soil cannot contain any detectable concentrations of contaminants other than Title 22 metals.
 - b) Samples shall be analyzed by an SW846 method using the reporting limits set forth in the Table provided in Attachment 1. From these data, the 90 percent UCL shall be determined. Prior to calculating the 90 percent UCL, one must determine whether the sample set is normally, lognormally or non-normally distributed. If lognormally distributed, one must determine the 90 percent UCL on the lognormal mean. If non-normally distributed, but sufficiently symmetrical, calculate the 90 percent UCL on the median (50th percentile), instead of the mean. See USEPA SW846 Chapter 9 and the USEPA Guidance for Data Quality Assessment for a discussion of waste characterization and statistical analysis; in particular the guidance on testing for normality, calculating a 90 percent UCL, and handling of non-detected values.⁶

⁶ See U.S. Environmental Protection Agency, Office of Solid Waste. 1986. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods;*

http://www.epa.gov/epaoswer/hazwaste/test/pdfs/chap9.pdf; and USEPA 2002, RCRA Waste Sampling Draft Technical Guidance, EPA 530-D-02-002 (Appendix F). Office of Solid Waste.

Tier 2	Soil	Screening	Levels
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	Inert Waste	Industrial	Background ^d			Tier 2
	Target ^a	CHHSL ^b	Max	1∕₂ Max	TTLC [®]	SSL ^{f,g}
Pollutant	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Antimony	6.0	380	1.95	0.98	500	6.0
Arsenic	50	0.24	11	5.5	500	5.5
Barium	1,000	63,000	1,400	700	10,000	1,000
Beryllium	4.0	1,700	2.7	1.4	75	4
Cadmium	5.0	7.5	1.70	0.85	100	5
Chromium, Total	50	100,000	1,579	790	2,500	790
Chromium, Hexavalent	50	37	NA	NA	500	37
Cobalt	NA	3,200	46.9	23.5	8,000	3,200
Copper	1,300	38,000	96.4	48.2	2,500	1,300
Lead	15	3,500	97.1	48.6	1,000	49
Mercury	2.0	180	0.90	0.45	20	2
Molybdenum	NA	4,800	9.6	4.8	3,500	3,500*
Nickel	100	16,000	509	255	2,000	255
Selenium	50	4,800	0.43	0.22	100	50
Silver	NA	4,800	8.30	4.2	500	500*
Thallium	2.0	63	1.10	0.55	700	2
Vanadium	50	6,700	288	144	2,400	144
Zinc	NA	100,000	236	118	5,000	5,000*

None of the analytical results from any samples collected to characterize the waste soil can exceed the Tier 2 Soil Screening Level for this pollutant.

a. Calculated using Central Valley Water Board Designated Level Methodology, where the Water Quality Goal is the lower value of the Federal or State drinking water primary maximum contaminant level, the Environmental Attenuation Factor is 10, and the Leachability Factor is 100.

b. Values taken from the California Environmental Protection Agency's Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties (CalEPA 2005).

c. Taken from Oak Ridge National Laboratory's *Preliminary Remediation Goals for Ecological Endpoints* (Efroymson, et al 1997)

d. Taken from Kearney Foundation of Soil Science Division of Agriculture and Natural Resources, University of California Background Concentrations of Trace and Major Elements in California Soil – Special Report (Bradford, et al 1996).

e. Total Threshold Limit Concentration. Concentrations above the TTLC would be classified as hazardous waste.

f. Tier 2 Soil Screening Level for inert waste soils that can be reused only for commercial or industrial land use designation. Tier II SSLs selected based on the following steps: Step 1) Select lower value of Industrial CHHSL or Inert Waste Target; Step 2) Select higher value of Step 1 or ½ Maximum Background; and, Step 3) Select lower value of Step 2 and Total Threshold Limit Concentration.

g. These values are not intended to provide clean up levels for soil remaining on-site. Such values should be established based on the contaminants of concern, the site use, and in conjunction with the regulatory agency providing oversight for the remediation effort.

- c) An Inert Waste Certification must be filed with the San Diego Water Board by the owner/operator of the export site within 30 days following export and placement of the soil. The Inert Waste Certification must include the following information:
 - i) Generator name and contact information
 - ii) Export site location, owner name and contact information
 - iii) Approximate volume of inert waste soil exported from the site
 - iv) Description of BMPs implemented to prevent discharge of waste soil off the export site during excavation and transport.

- v) Laboratory analytical data, including number of samples collected, EPA approved analytical methods used, the 90 percent UCL of the data for the contaminants of concern, and name of certified environmental analytical laboratory performing analysis
- vi) Import site owner name and contact information, with a map of the site location showing nearby surface water bodies, approximate depth to groundwater, and BMPs that will be implemented to eliminate the potential for discharge of inert waste soils to surface waters.
- vii) The import site owner, principal executive officer, or authorized representative must provide a signature acknowledging the receipt or planned receipt of the inert waste soil.
- viii) The export site owner, principal executive officer, or authorized representative, and a California registered professional engineer or geologist must sign and certify the Inert Waste Certification. The Inert Waste Certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*
- d) Tier 2 inert waste soil reused at commercial or industrial development sites must comply with the following conditions:
 - i) Tier 2 inert waste soil may only be reused on commercial or industrial sites. It may not be reused at residential, school, or park sites.
 - ii) Tier 2 inert waste soil must be placed at least 5 feet above the highest historically known or anticipated level of groundwater. The soil that separates the inert waste soil from groundwater shall have a significant clay content (greater than 5 percent clay material) or an in-situ permeability of less than 10⁻⁵ cm/sec.
 - iii) Tier 2 inert waste shall be placed at least 100 feet from the nearest surface water body.
 - iv) Tier 2 inert waste shall be protected against 100-year peak stream flows as defined by the County flood control agency.
 - v) Tier 2 inert waste shall be covered by either: 1) engineered materials (e.g. used as road base, fill beneath buildings, bridge abutments), or 2) not less than 2 feet of noncontaminated, clean fill. The cover shall have a permeability of no more than 10⁻⁵ cm/sec. Placement of a cover on the inert waste soils shall be completed with 30 days of discharging the final load of inert waste soils at the import site.