California Regional Water Quality Control Board
North Coast Region

ORDER NO. R1-2010-0044

Waste Discharge Requirements

For

Discharges Related to Road Management and Maintenance Activities Conducted Pursuant to the
Green Diamond Resource Company Aquatic Habitat Conservation Plan in the
North Coast Region

Region Wide

The California Regional Water Quality Control Board, North Coast Region, (hereinafter Regional Water Board) finds that:

1. Water Code section 13260(a) requires that any person discharging waste or proposing to discharge waste within any region that could affect the quality of the waters of the state, other than into a community sewer system, must file with the appropriate Regional Water Board a Report of Waste Discharge containing such information and data as may be required.

2. Under Water Code section 13263, the Regional Water Board shall prescribe requirements as to the nature of any proposed or existing discharge with relation to the receiving water conditions. Requirements shall implement any relevant Basin Plan requirements and take into consideration beneficial uses and objectives reasonably required to protect such uses, and other relevant factors.

3. Pursuant to Water Code section 13260(a), Green Diamond Resource Company (Green Diamond) submitted a report of waste discharges for its systematic road management on property covered by their Aquatic Habitat Conservation Plan (AHCP) in the following hydrologic areas: Smith River, Lower Klamath River, Redwood Creek, Maple Creek, Little River, Mad River, Jacoby Creek, Freshwater Creek, Elk River, Salmon Creek, and the Eel River. The AHCP is posted on the National Marine Fisheries Service website at http://swr.nmfs.noaa.gov/ahcp.htm The environmental impact statement for the AHCP can be found at http://swr.nmfs.noaa.gov/feis.htm.

4. Green Diamond's Road Management Plan is a comprehensive program to systematically upgrade and decommission the road system, maintain a prioritized sediment source inventory, implement routine maintenance and monitoring of the mainline and secondary road system, spend approximately $2.5 million per year (2002 dollars) through 2022 treating high and moderate priority sediment sources,
design detailed annual work plans, and perform post-treatment effectiveness monitoring. The Road Management Plan will provide better and more efficient protection of the beneficial uses of water associated with road management and maintenance activities than the timber harvest plan (THP) process because it addresses road related sediment sources systematically across the landscape and is not limited to areas currently being harvested under THPs. Adherence to the Road Management Plan will assure the Regional Water Board that minor maintenance problems do not become significant discharge sources and that sediment sources that are not scheduled for treatment in the short-term will receive timely treatment should site-specific conditions worsen.

5. This Order sets out waste discharge requirements (WDRs) for road management activities carried out by Green Diamond through the Road Management Plan from its AHCP. There are two key components of the Road Management Plan: (1) the Road Implementation Plan and (2) the Road Maintenance Program. The objective of the Road Implementation Plan (AHCP Section 6.2.3.2) is to carry out a systematic road upgrade and decommissioning program using the plan’s road assessment and treatment prioritization system (AHCP Section 6.2.3.1). The Road Maintenance Program (AHCP Section 6.2.3.9) requires routine inspections and maintenance of all mainline and secondary roads, which will keep upgraded roads at low risk for water quality impacts and will prevent and minimize catastrophic and chronic sediment sources on roads pending upgrade or decommissioning. All activities carried out under the Road Management Plan will comply with techniques and restrictions designed to prevent and minimize impacts to water quality, as detailed in the AHCP and the Master Agreement for Timber Operations.

6. This Order does not supersede Order No. R1-2004-0030 General Waste Discharge Requirements For Discharges Related to Timber Harvest Activities On Non-Federal Lands in the North Coast Region (GWDR). Instead, this Order is intended to complement the GWDR by providing separate coverage for discharge sources on the mainline and secondary road system inventoried and treated under the Road Management Plan. Other controllable sediment discharge sources, e.g. failing skid trail crossings and watercourse diversions within timber harvest units, will be inventoried and addressed through the Timber Harvest Plan process and covered under the GWDR or other Regional Water Board authorities.

7. This Order does not supersede Resolution No. R1-2006-0042 Waste Discharge Requirements for Timber Harvesting Plan Activities Conducted by or on Land Owned by the Green Diamond Resource Company in the South Fork Elk River Watershed or Monitoring and Reporting Program No. R1-2008-0092 for Timber Harvesting Plan Activities Conducted by or on Land Owned by the Green Diamond Resource Company in the South Fork Elk River Watershed, which contain, among other things, specific provisions for the inventory and repair of controllable sediment discharge sources and require adherence to erosion control plans and a master treatment schedule in the South Fork Elk River Watershed.
8. The following waste discharge prohibitions from the Water Quality Control Plan for the North Coast Region (Basin Plan) pertain to timber harvest activities, including logging, road construction, and associated activities in the North Coast Region:

**Prohibition 1:** The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.

**Prohibition 2:** The placing or disposal of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.

9. Pursuant to the Basin Plan, including State Water Resources Control Board Resolution No. 88-63, the existing and potential beneficial uses of waters potentially affected by the proposed activity include:

- Municipal and Domestic Supply (MUN)
- Agricultural Supply (AGR)
- Industrial Service Supply (IND)
- Industrial Process Supply (PROC)
- Groundwater Recharge (GWR)
- Freshwater Replenishment (FRSH)
- Navigation (NAV)
- Hydropower Generation (POW)
- Water Contact Recreation (REC-1)
- Non-contact Water Recreation (REC-2)
- Commercial and Sport Fishing (COMM)
- Aquaculture (AQUA)
- Warm Freshwater Habitat (WARM)
- Cold Freshwater Habitat (COLD)
- Estuarine Habitat (EST)
- Marine Habitat (MAR)
- Wildlife habitat (WILD)
- Preservation of Areas of Special Biological Significance (BIOL)
- Rare, Threatened, or Endangered Species (RARE)
- Migration of Aquatic Organisms (MIGR)
- Spawning, Reproduction, and/or Early Development (SPWN)
- Shellfish Harvesting (SHELL)
- Native American Culture (CUL)
- Flood Peak Attenuation/Flood Water Storage (FLD)
- Wetland Habitat (WET)
- Water Quality Enhancement (WQE)
- Subsistence Fishing (FISH)
- Preservation of Areas of Special Biological Significance (BIOL)
- Rare, Threatened, or Endangered Species (RARE)
- Migration of Aquatic Organisms (MIGR)
- Spawning, Reproduction, and/or Early Development (SPWN)
- Shellfish Harvesting (SHELL)
- Native American Culture (CUL)
- Flood Peak Attenuation/Flood Water Storage (FLD)
- Wetland Habitat (WET)
- Water Quality Enhancement (WQE)
- Subsistence Fishing (FISH)

The Basin Plan contains water quality objectives developed to protect the above-listed beneficial uses of water. Economic considerations were evaluated as required by law during the development of these objectives. Conditions, prohibitions, and provisions contained in this Order implement these previously
developed water quality objectives. Compliance with water quality standards will protect these beneficial uses.

10. This Order applies to areas located within hydrologic areas identified above in Finding 3, subject to promulgated total maximum daily loads (TMDL) for the following stream segments: Klamath, Eel, Mad, Redwood Creek, and areas that are listed as impaired for sediment and temperature for which a TMDL will be developed. Adopted TMDLs for sediment and temperature identify roads as a significant source of pollution and recommend improving practices for road construction and maintenance, reducing the overall mileage of roads through decommissioning unused roads and upgrading existing roads to reduce sediment delivery to streams, and protecting natural shade. Conditions and provisions of this Order are intended to reduce anthropogenic discharges from road management and maintenance activities. Compliance with this Order constitutes implementation of the sediment, turbidity, and temperature (TMDLs) in the project area for activities described herein, subject to periodic review, monitoring and reassessment.

11. On April 7, 2010, Department of Fish and Game adopted a mitigated negative declaration (SCH No. 2010042020) for the project in order to comply with CEQA. The Regional Water Board has reviewed and considered the environmental document and any proposed changes incorporated into the project or required as a condition of approval to avoid significant effects to the environment. The Regional Water Board will file a Notice of Determination within five days from the issuance of this order. Mitigation measures necessary to reduce or eliminate significant water quality impacts are included as conditions of approval in the Order section below.

THEREFORE, pursuant to Water Code section 13263, the Regional Water Board hereby approves and adopts Order No. R1-2010-0044, and directs the Executive Officer to file all appropriate notices. For activities under the AHCP Road Management Plan as described in Master Agreement for Timber Operations and Road Management WDR, Green Diamond Resource Company shall comply with the following:

I. SPECIFIC CONDITIONS

A. Sediment Source Inventory

Green Diamond will maintain a prioritized inventory of all road-related sediment sources tracked for treatment as part of AHCP section 6.2.3.1. Road-related sediment sources will be identified through aerial photo analyses, maps, and field inventories. Data for each potential sediment source will be kept in a database and this information will be furnished to Regional Water Board staff upon request.
Other controllable sediment discharge sources, e.g. failing skid trail crossings and watercourse diversions within timber harvest units, will be inventoried and addressed through the Timber Harvest Plan process and covered under the GWDR or other Regional Water Board authorities.

B. Annual Work Plan

An Annual Work Plan must be submitted to the Executive Officer by March 31 of each calendar year. Green Diamond will contact Regional Water Board staff, prior to submittal of the Annual Work Plan, to arrange preconsultations and solicit input for sites that have complex conditions, such as significant past erosion, large volumes of material that could discharge, or that will require grade control.

Regional Water Board staff will, by May 1, complete its initial review of the Annual Work Plan and notify Green Diamond of any exceptions. An exception is a project or activity described in the Annual Work Plan that either does not meet the requirements of this Order, requires additional information, or requires a site visit. Projects or activities not thus identified may commence on May 1 and are subject to all of the conditions set forth in this Order and in Section 11.0, A of the Master Agreement for Timber Operations.

In the case of exceptions, Regional Water Board staff and Green Diamond will attempt to promptly resolve the problem through discussion, solicitation of additional information, and/or field examination. If a site visit is required, a mutually agreeable inspection date will be scheduled as soon as possible, preferably within 30 days.

Within 15 working days of receiving additional information about or visiting the site of an exception, Regional Water Board staff will, in writing, either: a) approve the proposal, b) make site specific recommendations, c) request additional time for review, or d) explain and justify why the proposed project or activity does not meet the requirements of this Order. Upon receipt of written concurrence on any exception, Green Diamond may commence immediately. In the unlikely event that a resolution cannot be achieved for an exception, Regional Water Board staff will provide written explanation and justification within 90 days of a site visit.

The Annual Work Plan can be amended at any time with written concurrence from Regional Water Board staff. Such requests will be responded to within 15 working days. Urgent amendments may occur infrequently, and in these cases, Regional Water Board staff will respond within 5 working days unless a longer period is mutually agreed upon. Urgent amendments are rare and are typically sites discovered or modified during road decommissioning that could suspend the entire project if a longer waiting period was required.
The Annual Work Plan must, at a minimum, include:

1. A description of the planned activity, including the type (e.g. new road construction, decommissioning, upgrading, etc.) and scope of the work planned.

2. The timber harvest plan (THP) number, if applicable. Controllable sediment discharge sources covered under this Order do not need to be included in the inventory of erosion control plans of any associated THPs, but should be briefly described per the erosion control plan requirement of the GWDR.

3. Whether the proposed activity will be done on a Class I, II, or III watercourse or a restorable fish-bearing stream.

4. Location information, including township, range, and section numbers, road numbers, the name of streams and CALWATER identification number the proposed activity will affect, and a map of the work site with sufficient detail to enable a person who is not familiar with the area to easily locate the site.

5. Detailed work plans that describe the project or activity including:
   a. Estimate of the potential sediment volume that could discharge if left untreated;
   b. Estimate of the relative potential for sediment delivery;
   c. Description of the current site condition and the proposed work.
   d. Where warranted (e.g. associated with unstable areas), construction drawings, diagrams or sketches, cross sections and dimensions, including unstable conditions at each encroachment, such as debris torrents, landslides, unstable fill, etc.

6. The name, address, and telephone number of the contact person.

7. If the site is a controllable sediment discharge source and/or requires California Department of Fish and Game notification.

All activities conducted as part of the Annual Work Plan must comply with the Road Management Measures contained in AHCP section 6.2.3 and the additional conditions necessary for the protection of water quality set forth in Section 11.0.A of the Master Agreement for Timber Operations and the provisions of this Order.

C. Routine Road Maintenance and Inspection

1. Roads will be inspected to assess the effectiveness and condition of all erosion and drainage structures. Mainline roads and roads appurtenant to
THPs will be inspected annually and secondary management roads accessible by truck will be inspected on a 3-year rotating basis.

2. If Regional Water Board staff identifies specific evidence of greater risk than identified by Green Diamond, Regional Water Board staff may require, if warranted, individual controllable sediment discharge sources on secondary management roads to be inspected on an annual basis (i.e. put on the “watch list”).

3. Needed repairs will be prioritized as low, moderate, or high, with a goal of completing priority tasks prior to the winter period. Lower priority sites may be held over until the following maintenance year if the workload is excessive.

4. Sites on roads that have not yet been upgraded or decommissioned and that are determined to have an extreme risk of imminent failure will be repaired or replaced prior to the subsequent winter period. Extreme risk of imminent failure means that the site is likely to fail before the next scheduled maintenance period and is determined by the Decision Tree included in Attachment A.

5. Emergency inspections will occur during or immediately after storm events which produce 3 inches of precipitation or more during a 24-hour period. Immediate repairs will occur if hand labor can correct the problem. Major repairs will be prioritized and scheduled according to access and conditions.

D. Monitoring and Reporting Requirements:

1. Post-Treatment Monitoring
   Each completed activity must be inspected twice to evaluate the implementation and effectiveness of the completed treatment; once prior to the winter period and once following a full winter. If the site has stabilized and there is no reasonable potential for waste discharge in violation of the Basin Plan, future monitoring may defer to the Routine Road Maintenance and Inspection program.

   Any minor maintenance issue identified following implementation such as culvert cleaning, re-installation of waterbreaks or critical dips, or removal of vegetation will be conducted as soon as feasible prior to the next winter period.

   Any major maintenance issue identified following implementation such as culvert separation, fill failure resulting in significant sediment delivery or watercourse diversion will be conducted as soon as feasible prior to the next winter period. A facility that receives major maintenance will be monitored for an additional year, once prior to the winter period and once following a full winter.
2. Reporting

a. An Annual Report of projects and activities implemented pursuant to this Order during the prior calendar year must be submitted to the Executive Officer by March 31 of each calendar year. The report must:
   1. Summarize the completion and inspection of all activities performed as identified in the Annual Work Plan from the previous operating season.
   2. Provide an explanation and revised treatment schedule for any site that went untreated.
   3. Include the date of the inspection, the type of site, the name or designation of the site associated with the Annual Work Plan, and photographs, if available.
   4. Include the name, address, and telephone number of the contact person.
   5. Include a summary of the sediment savings from treating high and moderate sites and a list of the maintenance area and road work unit areas treated from the previous operating season in accordance with the AHCP Road Management Plan.

b. Post-Winter Monitoring Report
   A monthly Post-Winter Monitoring Report must be submitted electronically to Regional Water Board staff at the end of each month from July through October. The Post-Winter Monitoring Report will summarize the progress of the post-winter inspections and will include the following information:
   1. A list of all sites included in the Annual Work Plan, and for each site,
   2. the date of inspection;
   3. and any major or minor maintenance issues identified following implementation.

E. Emergency Maintenance

If there is an imminent threat to life, property, or public safety, or a potential for a sediment input with catastrophic environmental consequences, Green Diamond will notify Regional Water Board staff of the emergency and the planned or implemented action within 14 calendar days.

II. GENERAL CONDITIONS

A. Discharge Prohibitions

1. Discharges of waste, which are not otherwise authorized by waste discharge requirements issued by this Regional Water Board or the State Water Resources Control Board, to waters of the state are prohibited, except as allowed below in section A.5.
2. Discharges must not cause or threaten to cause pollution, contamination, or nuisance.

3. Discharges must not adversely impact human health or the environment or the beneficial uses of water set out in the Basin Plan.

4. Authorization pursuant to these WDRs does not constitute an exemption to applicable water quality requirements.

5. Discharges are authorized only where they do not cause or contribute to a violation or exceedence of applicable water quality requirements and are controlled through implementation of appropriate project design and management measures for prevention and minimization of waste discharges.

B. Road management and maintenance activities must be implemented to ensure retention of natural shade conditions to the extent feasible while allowing for safe operation and travel, reshaping and grading of the road surface, stabilizing of road cutbanks, and installation of drainage structures. Natural shade conditions are defined as the shade on a watercourse that results from the naturally occurring vegetative community at site potential and topographic configuration.

C. Green Diamond will preconsult with staff from the Regional Water Board prior to daylighting, for the purpose of road surface drying, road segments within riparian zones, except for tree removal necessary for crossing construction or reconstruction which follow General Condition II.B.

D. Any dispute regarding the treatment of a sediment source that arises during a site inspection will be resolved through field examination and discussion, with the resolution ultimately agreed upon by Regional Water Board and Green Diamond management.

E. Green Diamond must comply with all applicable mitigation measures identified in the Initial Study/Mitigated Negative Declaration adopted by the Department of Fish and Game FGC Sec 1600 et seq, as set forth in this Order and Section 11.0.A of the Master Agreement for Timber Operations. Compliance with these mitigation measures are requirements under this Order. Violation of any such requirements subject Green Diamond to enforcement action, including civil liability, under the Water Code.

F. Green Diamond must allow the Regional Water Board staff entry onto the affected property, with reasonable notice, for the purposes of observing, inspecting, photographing, video taping, measuring, and/or collecting samples...
or other monitoring information to document compliance or non-compliance with this Order.

G. Green Diamond must allow Regional Water Board staff access to copy at reasonable times any records that must be kept under the conditions of these WDRs.

H. Green Diamond must develop and implement additional monitoring and reporting requirements when the necessity of such measures is supported by evidence and the measures are described in writing by the Executive Officer.

I. All activities covered by this Order must comply with local, state, and federal law.

J. No discharge of waste into the waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights. (Wat. Code, § 13262, subd.(g).)

K. Prior to implementing any change to the project or activity that may have a significant or material effect on the findings, conclusions, or conditions of this Order, the Applicant shall obtain the written approval of the Regional Water Board Executive Officer.

L. The Regional Water Board may add to or modify the conditions of this Order, with notice and as appropriate, to implement any new or revised water quality standards and implementation plans adopted and approved pursuant to the Porter-Cologne Water Quality Control Act or Section 303 of the Clean Water Act.

M. These WDRs may be modified, revoked and reissued, or terminated for cause. Changes to the AHCP which influence these WDRs, compliance with the conditions of these WDRs, or contribute to a violation or exceedence of applicable water quality requirements may be cause for reopening these WDRs.

III. RECISSION AND DENIAL OF COVERAGE

A. The Executive Officer shall rescind or deny the applicability of this Order to any individual project or activity within the Annual Work Plan if the Executive Officer makes any of the following determinations:

1. The project or activity does not comply with any condition or provision of this Order;
2. The project or activity is reasonably likely to result or has resulted in a violation or exceedence of any applicable water quality requirement;
3. The project or activity has varied in whole or in any part from the approved project in any way that could adversely affect water quality;

4. When requested by Green Diamond, another state agency (upon a demonstration that the project or activity would cause an exceedance of water quality standards or otherwise violate these WDRs), a subdivision of the state (county) or a federal agency, and with concurrence by the Executive Officer.

5. The project or activity meets the WDR terms, but may still result in discharge that could affect the quality of waters of the state.

B. Upon receipt of a written notice of rescission or denial of coverage for a project or activity under these WDRs, the applicability of this Order to the covered project or activity is immediately terminated. Upon termination, Green Diamond must immediately cease all activities that may result in un-permitted discharges of waste to waters of the state, other than activities necessary to control further discharges.

Certification:

I, Catherine Kuhlman, Executive Officer do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on June 10, 2010.

___________________________
Catherine Kuhlman
Executive Officer

(10_0044_WDR_GDRC)
Attachment A:

Decision Tree For Determining If A Site Poses An Extreme Risk Of Imminent Failure

General Condition

Specific Thresholds

Extreme Risk?

- 25% of culvert length
- <25% of culvert length

Rusted through

No

Culvert separated

No

Flow under culvert

No

Culvert shotgun

No

Blockage of culvert

No

Inlet or Outlet Blockage

Debris within one culvert diameter that can create a culvert blockage

No

Evidence of past or present diversion

No evidence of past diversion

Diversion Potential

Yes

No

Under-sized Culvert

Indicators of exceeding culvert capacity (bonding at inlet, debris accumulation in front of or above culvert inlet)

No

Inboard Ditch Line Without Adequate Ditch Relief

Active downcutting of ditch line resulting in direct sediment delivery to a watercourse

No

Areas of Higher Sensitive Aquatic Resources

Active erosion that shows evidence of direct delivery to a year-round or seasonally flow-bearing watercourse or within 100 feet of a domestic water source

No