California Regional Water Quality Control Board
North Coast Region

Cleanup and Abatement Order No. R1-2004-0076

For

Brookfield Investors, LLC

Regarding
10100 Brooks Road, Windsor

Sonoma County

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

1. Brookfield Investors, LLC. (hereinafter Discharger), owners of the Diamond Springs Property, conducted filling and culverting activities in wetland habitat and on several intermittent streams that are tributary to Starr Creek, tributary to the Russian River. The work occurred on the Diamond Springs Property, located at 10100 Brooks Road, Windsor, Sonoma County (APN 086-180-005) (hereinafter Site). The work was not permitted by the Regional Water Quality Control Board (Regional Water Board) and therefore constituted a violation of the California Water Code (CWC) and the Clean Water Act, Section 401 (CWA Section 401).

2. On February 28, 2004, Regional Water Board staff (hereinafter Staff) conducted an initial inspection of the Site . The inspection was conducted in response to a referral from the County of Sonoma Permit and Resource Management Department (PRMD). Staff determined that recent construction activities had occurred on the Site and that fill had been placed within and immediately adjacent to waters of the State. Staff set up a follow up site visit for June 14, 2004.

3. On June 14, 2004, Staff conducted the follow-up inspection, which included a representative of the discharger and representatives from the California Department of Fish and Game (DFG) and the US Army Corps of Engineers (ACOE). The group assessed several locations identified by PRMD as potential areas of impact, and determined that several intermittent creeks had been culverted and filled apparently to prepare the site for vineyards and/or estate lots (Appendix A – Photos 1-16). The Discharger's representative stated that Brookfield Investors, LLC had purchased the property in 1993. In 2001, the property was graded and culverts were installed, which completely captured the flow of several small intermittent tributaries, and one potentially perennial stream. Staff requested copies of aerial photos, and any other pre-project and

post-project photos the Discharger had in order to assist in the assessment of the potential impacts to waters of the state.

4. On June 29, 2004, Staff participated in an interagency inspection of the Site, with representatives from DFG, PRMD, NOAA Fisheries and representatives of the Discharger. The purpose of the inspection was to determine the extent of filling activities.

   The inspection determined and documented that extensive mass grading and filling and culverting of intermittent tributaries and wetland habitat that was not permitted or authorized by the Regional Water Board or any other responsible agency had occurred (Enclosure 2 - Inspection Memo dated July 15, 2004). The unauthorized work, and resultant discharge of sediment to the wetlands and unnamed tributaries of Starr Creek, adversely impacted water quality and beneficial uses and constitutes a violation of provisions of the California Water Code.

5. The streams and wetlands described above are tributary Starr Creek, which is tributary to the Russian River, and have actual and potential beneficial uses, as designated in the Water Quality Control Plan for the North Coast Region (Basin Plan), that include:

   a. Municipal and domestic supply
   b. Agricultural supply
   c. Industrial supply
   d. Industrial service supply
   e. Groundwater recharge
   f. Navigation
   g. Hydropower generation
   g. Water contact recreation
   h. Non-contact water recreation
   i. Commercial and sport fishing
   j. Warm freshwater habitat
   k. Cold freshwater habitat
   l. Rare, threatened, or endangered species
   m. Wildlife habitat
   n. Migration of aquatic organisms
   o. Spawning, reproduction, and/or early development
   p. Estuarine habitat
   q. Aquaculture

6. The Basin Plan contains specific standards and provisions for maintaining high quality waters of the state that provide for the beneficial uses listed above. The Action Plan for Logging, Construction and Associated Activities (Action Plan) included in the Basin Plan includes two prohibitions:

- 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 which could be deleterious to fish, wildlife, or other beneficial uses is prohibited.*"

7. The Action Plan states: "where investigations indicate that the beneficial uses of water may be adversely affected by waste discharges, the staff shall require the submission of Reports of Waste Discharge."

8. Section 3 of the Basin Plan contains water quality objectives that specify limitations on certain water quality parameters not to be exceeded as a result of waste discharges. The water quality objectives (pages 3-2.00 and 3-3.00) that are considered of particular importance in protecting the beneficial uses from unreasonable effects due to discharges from logging, construction, or associated activities, include the following:

   - Color: Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses.

   - Suspended Material: Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

   - Settleable Material: Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

   - Sediment: The suspended sediment load and suspended discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

   - Turbidity: Turbidity shall not be increased more than 20 percent above naturally occurring back ground levels. Allowable zones within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.

9. The following sections of the Porter-Cologne Water Quality Control Act authorize the Regional Water Board to require persons to remediate unpermitted discharges of waste:

- Section 13267(a) - *"A regional board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement or authorized by this division, may investigate the quality of any waters of the state within its region."*

- Section 13267(b) - *"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or proposes to discharge waste within its region…that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires."*

- Section 13267(c) - *"In conducting an investigation pursuant to subdivision (a), the regional board may inspect the facilities of any person to ascertain whether the purposes of this division are being met and waste discharge requirements are being complied with. The inspection shall be made with the consent of the owner or possessor of the facilities or, if the consent is withheld, with a warrant duly issued pursuant to the procedure set forth in Title 13 (commencing with Section 1822.50) of Part 3 of the Code of Civil Procedure. However, in the event of an emergency affecting the public health or safety, an inspection may be performed without consent or the issuance of a warrant."*

- Section 13304(a) - *"Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts."*

10. As described above, the Discharger has culverted and discharged fill material into several intermittent streams, impacted wetland habitat on the Windsor Oaks Vineyards Property and the Site, and has caused excessive erosion into an intermittent tributary to Starr Creek resulting from mass grading of the Site, and has therefore caused a discharge of waste into waters of the state.

11. The culverting and filling of the intermittent tributary streams, caused the direct loss of intermittent stream, riparian and wetland habitat and associated functions and values, which is deleterious to wildlife, and other beneficial uses, and therefore violates Prohibitions 1 and 2 in the Action Plan. Stream habitat and associated riparian and wetland habitat generally consists of linear habitat that perform important functions related to water quality including but not limited to: providing habitat for aquatic species and wildlife; water quality enhancement; flood peak attenuation and flood water storage; and potential habitat for rare and endangered species. Removal of this habitat due to the

discharge and threatened discharge of sediment is deleterious to aquatic species and wildlife, and other beneficial uses, and therefore violates Prohibitions 1 and 2 in the Action Plan as described in finding 6 above. These detrimental effects also constitute the creation of pollution or nuisance. The discharge of the dirt fill material and culverting of these waterways is therefore subject to cleanup and abatement under California Water Code Section (CWC) 13304.

12. A restoration workplan required by this Order is necessary to ensure that the prior harm and future threat to water quality created by the discharges described above are properly abated and controlled.

13. This is an enforcement action by a regulatory agency, being taken for the protection of the environment, and is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, Section 21000 et seq.) in accordance with California Code of Regulations (CCRs), Title 14, Sections 15308 and 15321.

14. Failure to comply with the terms of this Order may result in enforcement under the CWC. Any person failing to provide technical reports containing information required by this Order by the required date(s) or falsifying any information in the technical reports is, pursuant to CWC Section 13268, guilty of a misdemeanor and may be subject to administrative civil liabilities of up to one thousand dollars ($1,000.00) for each day in which the violation occurs. Any person failing to cleanup or abate threatened or actual discharges as required by this Order is, pursuant to CWC Section 13350(e), subject to administrative civil liabilities of up to five thousand dollars ($5,000.00) per day or ten dollars ($10) per gallon of waste discharged.

15. Any person affected by this action of the Regional Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with CWC Section 13320 and Title 23, CCRs, Section 2050. The State Water Board must receive the petition within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Water Board, any person affected by this Order may request the Executive Officer to reconsider this Order. To be timely, such request must be made within 30 days of the date of this Order. Note that even if reconsideration by the Executive Officer is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner's legal rights. If you choose to request reconsideration of this Order or file a petition with the State Water Board, be advised that you must comply with the Order while your request for reconsideration and/or petition is being considered.

THEREFORE, IT IS HEREBY ORDERED that, pursuant to CWC Sections 13267(b) and 13304:

The Discharger shall coordinate and perform the following cleanup and abatement actions:

1. Submit copies of aerial photographs of the Site, showing both pre-project conditions and post-project conditions by **September 24, 2004**.

2. Submit a copy of the drainage map showing the limits of grading, and the locations and extent of all underground piping that was installed on the Site, by **September 24, 2004**.

3. Submit a plan to stabilize the landslide areas and associated erosion identified in Finding #4 above, and to remove accumulated sediment from the intermittent stream that has been impacted by severe sediment discharges associated with the landslides by **September 24, 2004**. The plan shall be implemented prior to October 15, 2004, upon concurrence from the Regional Water Board.

   - Removal of the accumulated sediment shall not result in any further impacts to the riparian habitat along the intermittent stream, and therefore shall be conducted by hand, or other means not damaging to the stream habitat.

   - The plan shall include an erosion control plan for the Site, which outlines specific Best Management Practices (BMPs) to be implemented to control erosion on the graded areas of the Site. The plan shall also include a time schedule for installation and a maintenance schedule to ensure that the BMPs are functioning properly.

4. Submit a restoration workplan to the Regional Water Board, for Executive Officer concurrence, on or before **October 22, 2004**, that includes the following:

   a. A Workplan for removing the linear culverts and fill material from all intermittent tributaries that have been filled on the Site. The Workplan shall include information regarding the location and suitability of a chosen disposal site for the excavated fill material;

   b. a detailed restoration plan that addresses the timely restoring of all stream habitat on the Site affected by the culverting and filling activities. The plan shall contain a time schedule for restoration activities, success criteria to judge the success of the restoration project, and a monitoring proposal to evaluate whether the success criteria are being met;

   c. a plan to provide additional mitigation to account for the temporal loss of stream habitat that has occurred as a result of the unauthorized filling activities. Such mitigation can include restoration and/or creation of stream habitat elsewhere in the watershed, restoration of intermittent stream habitat and associated riparian and/or wetland habitat elsewhere on the Site, and;

5. Submit an application for a Water Quality Certification and/or Waste Discharge Requirements for Dredge/Fill Projects (Enclosure 3), and appropriate processing fees, to the Regional Water Board, for Executive Officer concurrence, to cover activities associated with the restoration Workplan, by **November 30, 2004**.

6. Following Executive Officer written concurrence, implement the restoration workplan. If the Executive Officer does not issue a concurrence or non-concurrence by February 1, 2004, the Workplan shall be deemed approved and the Workplan shall be implemented as proposed. The Workplan shall be implemented during the summer season of 2005. All work to remove the culverting and associated fill material and restore the affected stream, riparian and wetland habitat shall be completed after **June 15, 2005** and before **October 16, 2005**.

If, for any reason, the Dischargers are unable to perform any activity or submit any documentation in compliance with the deadlines in the workplan implementation schedule submitted pursuant to this Order and concurred with by the Executive Officer, the Dischargers may request, in writing, an extension of the time as specified. The written extension request shall include justification for the delay and shall be received by the Regional Water Board not less than 15 calendar days prior to the deadline sought to be extended. An extension may be granted for good cause, in which case this Order will be accordingly revised.

This CAO in no way limits the authority of this Regional Water Board to institute additional enforcement actions or to require additional investigation and cleanup at the facility consistent with California Water Code. This CAO may be revised by the Executive Officer as additional information becomes available.

Ordered by _____

Catherine E. Kuhlman
Executive Officer

August 23, 2004

Appendix A – Site Photos taken February 28, 2004, May 21, 2004, June 14, 2004, and June 29, 2004, by Regional Water Board staff member Andrew Jensen.

Photo 1. View of Land Slide #1 (LS#1) and newly placed pipe, facing down towards the intermittent stream that was inundated with sediment. 6/29/04.

Photo 2. Land Slide #1 discharge point into an intermittent stream that flows through the site, with large accumulation of fines and sand within the stream channel. 6/29/04.

Photo 3. Intermittent stream directly above discharge point of LS#1. 6/29/04.

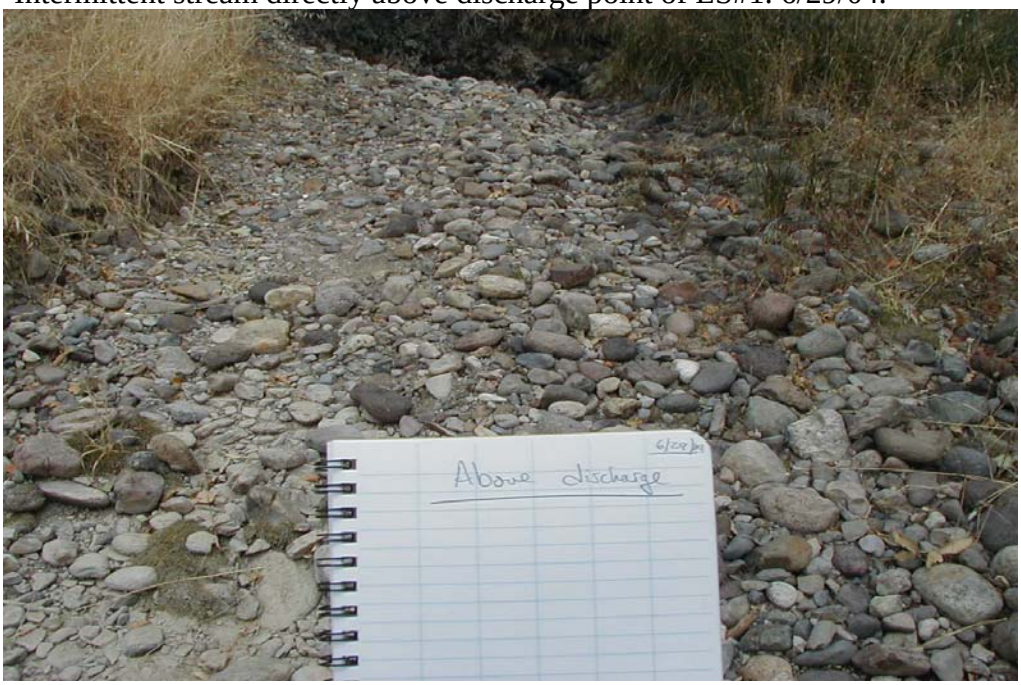

Photo 4. Intermittent stream directly below discharge point of LS#1. 6/29/04.

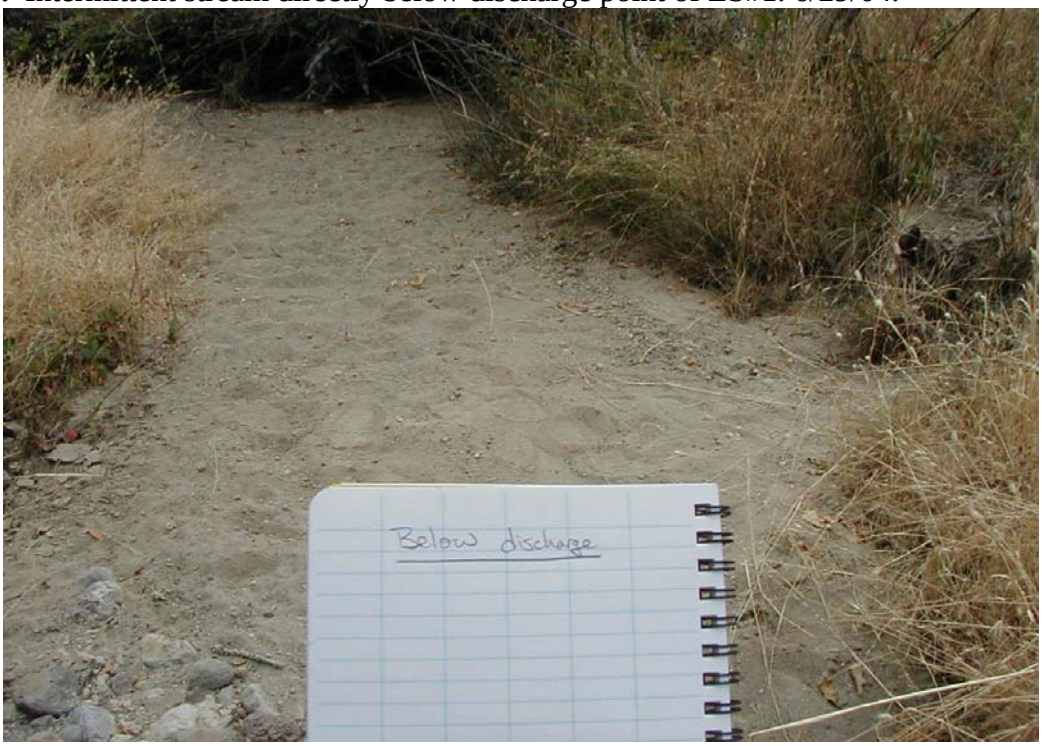

Photo 5. Intermittent stream approximately 150-feet below discharge point of LS#1. 6/29/04

Photo 6. View of Land Slide #2 (LS#2), facing down towards the intermittent stream. 6/29/04.

Photo 7. View of the unauthorized stream crossing, placed in the intermittent stream upstream of LS #1&2. 6/29/04

Photo 8. Intermittent stream that has been culverted and filled. Drop inlet structure shown in foreground of photo. 6/14/04

Photo 9. Intermittent stream that is culverted and filled from the northern property boundary at the fence line, through the Diamond Springs site. 6/29/04

Photo 10. Small headwater of an intermittent drainage that has been filled along the northern property boundary. 6/29/04

Photo 11. Another view of the small headwater of an intermittent drainage that has been filled along the northern property boundary. 2/18/04

Photo 12. View of a culverted intermittent drainage and filling of wetland habitat, taken from adjacent property. Drop inlet structure and new culvert shown at the fence line. Mr. Andrew Baker is shown in photo for scale. 5/21/04

Photo 13. Culverted and filled wetland swale feature, that flows from Windsor Oaks Vineyards property onto the Diamond Springs Property, where it has been filled and culverted at the fence line. 5/21/04

Photo 14. Outfall structure where all piped drainages discharge as a single source back into a remnant section of Starr Creek Tributary #3, which was not filled. Active flow coming out of pipe at time of photo. 6/29/04

Photo 15. View of a second unauthorized stream crossing, placed into Starr Creek Tributary #3, just below of the outfall structure. The crossing was replaced in approximately 2001, without any permits from the resource agencies. 6/29/04

Photo 16. View of Starr Creek Tributary #3 directly downstream of culverted and filled sections on Diamond Springs property. Stream had flow at time of inspection. 6/29/04

Enclosure 2 – Inspection Memo dated July 15, 2004.

Memorandum

To: File

CC: John Short; Andrew Baker

From: Andrew Jensen

Date: 7/15/2004

Re: Diamond Springs Enforcement Inspection Memo

On February 28, 2004, Andrew Baker and I conducted an initial inspection of the Windsor Oaks Vineyards site in response to the County of Sonoma PRMD's (PRMD) referral. The purpose of our site visit was to respond to complaints from Mr. Doug Lumgair, General Manager of Windsor Oaks Vineyards, regarding the adjacent property owner. We took several photos and assessed the impacts on the adjacent property, now known as Diamond Springs, owned by Brookfield Investors, LLC. The Diamond Springs Property is located at 10100 Brooks Road in Windsor, Sonoma County (APN 086-180-005). We determined that there appeared to have been filling of waters of the state on the Diamond Springs site. Mr. Baker contacted Mr. Richard Carnation of Waterworks Industries, Inc., and Brookfield Investors, LLC, to set up a site visit. After several attempts, Mr. Baker finally talked with Mr. Carnation and set up a site visit for June 14, 2004. It was determined that the site visit should include the California Department of Fish and Game (DFG) and the U.S. Army Corps of Engineers (ACOE).

On June 14, 2004 Andrew Baker and I met with Mr. Rich Carnation, Mr. Rick Swinth of Enterra Associates, Inc., Mr. Liam Davis of DFG, and Ms. Katerina Galacatos and Mr. Dan Martel of the ACOE, and conducted a site inspection of the Diamond Springs property to determine the extent of filling of jurisdictional waters. We assessed several locations identified by Mr. Doble as potential areas of impact, and determined that it appeared that several intermittent creeks had been culverted and filled over, to prepare the site for vineyards and/or estate lots. According to Mr. Carnation, Mr. Charlie Patterson, Wetland Ecologist, had done a preliminary survey of he site in 2000 and 2001, but apparently he did not file a report of his findings. According to Mr. Carnation, Brookfield Investors, LLC purchased the property in 1993. In 2001, the property was apparently graded and culverts were installed, which drain several small intermittent tributaries, and one potentially perennial stream. The drainages are intercepted at the northern most property boundary (fence line), and then daylight into tributary of Starr Creek, designated as Tributary 3 of Starr Creek on the Sonoma County Water Agency Hydrological Maps of March 21, 1984. I

requested copies of aerial photos, and any other pre-project and post-project photos Mr. Carnation had, to assist in the assessment of the potential impacts to waters of the state. Ms. Galacatos also requested copies of all aerial photographs and any other additional photos that may be helpful in determining the extent of potential filling of jurisdictional drainages. In addition, I stated that I would like to have the U.S. Army Corps of Engineers (ACOE), the California Department of Fish and Game (DFG), and the County of Sonoma come out to the site with me for a follow-up inspection to coordinate potential enforcement actions.

On June 29, 2004 I participated in an interagency inspection of the Diamond Springs Property, with Mr. Andrew Baker, Mr. Liam Davis, Mr. Alan Buckmann and Mr. Mike Otto of DFG, Mr. Nathan Quarles and Mr. Kevin Doble of Sonoma County Permit and Resource Department, Mr. Daniel Logan and Mr. Joe Giurdano of NOAA Fisheries, Mr. Charlie Patterson, Mr. Rick Swinth of Enterra, and Mr. Rich Carnation of Brookfield Investors, LLC. We toured the majority of the site to determine the extent of potential filling activities. As mentioned previously, according to the SCWA's Hydrology Map dated March 21, 1984, Starr Creek Tributary #3 (Starr Creek T-3) flows through the site, from the northern property boundary to the southern boundary. The following is a list of potential discharge points:

Land Slide #1 (LS#1):
East of the main entrance road, we stopped and looked at an area that has significant landslides and erosion that has discharged a significant amount of sediment into a small intermittent stream. The landslides and erosion appear to have been caused by the grading of the area, which destabilized the slopes. At the toe of the slope, between the slide and the intermittent stream, there is some old degraded silt fencing, and upon a closer look, there was another section of silt fencing that had been completely overwhelmed by a sediment flow, and was knocked down and buried. The newer silt fence has also been knocked down in sections due to significant sediment discharges of off the slope. As a side note, the new silt fence was not properly installed, as the bottom was not buried below grade. The stream above the sediment discharge point is cobble dominated and below the discharge point the entire channel is filled with silt/sand for approximately 450 lineal feet downstream.

Land Slide #2 (LS #2):
Slightly upstream of LS #1, there is another significant landslide and erosion area referred to as LS #2 in my notes. This area has a small detention basin at the top of the slope that appears to have a new culvert that had been installed during a time when conditions were wet. There was a significant amount of sediment discharged into the intermittent stream. The stream flows into an instream impoundment, which then continues to Starr Creek.

Illegal Stream Crossing (ISC #1):
Just below LS #2, there was a crossing installed in the stream, which consisted of a new plastic corrugated pipe and unconsolidated gravel fill material. The culvert was placed in the stream without any permits from the various resource agencies.

Culverted Stream Section #1 (CS #1):
At the northeastern section of the property, an intermittent stream had been culverted and filled. There was a drop inlet structure that leads into a pipe that then flows through the site to the eventual day lighted culvert into Starr Creek. It will be necessary to review aerial photographs, additional pre- and post- project photos, and grading plans, in order to determine the length of filling that occurred.

Culverted Stream Section #2 (CS#2):
Another section of intermittent stream is intercepted at the northern property boundary (fence line) with a drop inlet into a subsurface culvert. The area has been completely filled and piped.

Culverted Stream Section #3 (CS#3):
At the northern property boundary, a small headwaters section of stream terminates into a fill prism. There is evidence of flow and since the site has been graded, there is no longer an outlet for any flow within this section of headwaters stream.

Culverted Stream Section / Wetland Impacts (CS #4 and WI #1):
Along the western boundary along the fence line the owner has installed a culvert that extends through the adjacent property, Windsor Oaks Vineyards, and ties into an existing culvert outfall. The installation of the new culvert impacted habitat determined to be wetland by the ACOE during an earlier site visit (June 14, 2004) on the Windsor Oaks Vineyards Property. In addition, two large mature oaks trees that were within the bottom of a swale area, were killed due to the trenching, and subsequent root damage, associated with the culvert placement. The wetland area ends at a new fill prism on the Diamond Springs Property, which appears to have reduced the overall footprint of the wetland feature.

Culverted Stream Section #5 / Wetland Impacts #2(CS#5 and WI #2):
Similar to CS#4 and WI#1 described above, there was a wetland swale feature that flows down slope from Windsor Oaks Vineyards to the Diamond Springs Property, where it currently terminates into a fill prism created during the mass grading and filling of the site.

Outfall Structure #1 (OS#1):
The outfall structure is the culvert outfall where all the piped drainages discharge as a single source, a 36-inch plastic culvert outfall, into the remnant section of Starr Creek Tributary #3, that was not filled during mass grading of the site. The outfall structure had a continuous small flow exiting the pipe during the time of the inspection. The stream section below the outfall structure was flowing during the inspection (Photo 14), and there were numerous tadpoles and abundant aquatic macro invertebrates present. Representatives from NOAA Fisheries determined that the stream may provide spawning and rearing habitat for steelhead trout (*Oncorhynchus mykiss*), barring any downstream passage impediments.

Illegal Stream Crossing #2 (ISC #2):
There is a stream crossing that was replaced during the mass grading of the site in approximately 2001, which crosses Starr Creek Tributary #3, just below of the OS#1, described above.

Summary:
In summary, the DFG determined that several jurisdictional intermittent waters and wetland areas had been impacted by the mass grading and culverting that has occurred on the site in recent years, and Mr. Otto requested copies of aerial photographs, pre- and post-project photos, and other supporting information, to be submitted by July 29, 2004. I determined that several intermittent waters had been filled and culverted, and that some undetermined amount of associated wetland habitat had also been filled and/or impacted. I told the group, and specifically Mr. Carnation, that the Regional Water Board would issue either a CWC Section 13267 Order, requiring submittal of a report, which shall include aerial photos and on-the-ground photos of the areas, pre-project, or a Clean-up and Abatement Order. I also stated that if the submitted information lends new information that contradicts my field assessment, that information would be considered during the enforcement proceedings. I n addition, I stated that I would work closely with the ACOE and DFG to determine the overall extent of impacts and appropriate follow-up measures, additional enforcement actions, as well as necessary remediation and mitigation measures. I told Mr. Carnation to start compiling the photos and associated supporting documentation.

Enclosure 3 – Application for Report of Waste Discharge for Dredge and Fill Projects.