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March 22, 2013

VIA ELECTRONIC MAIL AND FEDERAL EXPRESS

Ms. Dyan Whyte
Assistant Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Re: *Submittal of Line Drawing of Flows, Sources of Pollution, and Treatment Technologies (Directive 3) and Background Monitoring Report (Directive 6) – January 22, 2013 Water Code section 13267 Order, Order No. R2-2013-1005*

Dear Ms. Whyte:

Enclosed, pursuant to Directives 3 and 6 of the Regional Water Quality Control Board, San Francisco Bay Region's, ("Regional Water Board") January 22, 2013 Water Code section 13267 Order, Order No. R2-2013-1005, ("Order"), as modified per the parties' discussions, Lehigh Southwest Cement Company ("Lehigh") timely encloses the following documents:

- Directive 3 – Line Drawing of Flows, Sources of Pollution, and Treatment Technologies. This submittal is intended for use in preparing the individual NPDES permit for the facility; additional line drawings will be submitted per the expected revised terms of the Order.

- Directive 6 – Background Monitoring Report. This summarizes the sampling conducted in February 2013 pursuant to the previously submitted March 13, 2013 Background Monitoring Plan.

If you or your staff have any questions regarding the enclosed documents, or would like to discuss further, please do not hesitate to contact me.

Very truly yours,

Nicole E. Granquist

Nicole E. Granquist

Cc: Brian Thompson, Regional Water Quality Control Board, San Francisco Bay Region
Ellen Howard, Counsel, State Water Resources Control Board
John Gillan, Deputy General Counsel, Lehigh
Greg Knapp, Director Environmental Region West, Lehigh

March 22, 2013 Project No. 063-7109-914

Ms. Dyan Whyte
Assistant Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: LINE DRAWING OF FLOWS, SOURCES OF POLLUTION AND TREATMENT TECHNOLOGIES, LEHIGH PERMANENTE FACILITY

Dear Ms. Whyte:

Transmitted herewith are three (3) line drawings of flows, sources of pollution and treatment technologies for the Lehigh Permanente Facility, in Cupertino, Santa Clara County submitted on behalf of Lehigh Southwest Cement Company. These line drawings have been prepared in partial fulfillment of the 13267 Investigative Order No. R2-2013-1005, Order Item No. 3. The three line drawings represent three stages of development of modifications to Permanente Facility's water management system for implementation of a water treatment plant:

- Figure 1, Current Flow Configuration
- Figure 2, Mid Pilot (Interim) Flow Configuration
- Figure 3, Final Flow Configuration

The figures are color coded to clearly show the rerouting of flows and addition of storage and treatment facilities necessary for water treatment. Also, different line types are used to show active process flows and emergency flows. Please refer to the legend provided with each figure for easy identification of the progression of water treatment development for the Permanente Facility.

Please feel free to contact Paul Pigeon at (303) 980-0540 or (720) 252-9835 with any questions on this submittal.

GOLDER ASSOCIATES INC.

Paul E. Pigeon
Associate/Senior Consultant

George Wegmann
Senior Geologist

Attachments: Line Drawings (3)

cc: Greg Knapp, Lehigh Southwest Cement Company
Nicole Granquist, Downey Brand

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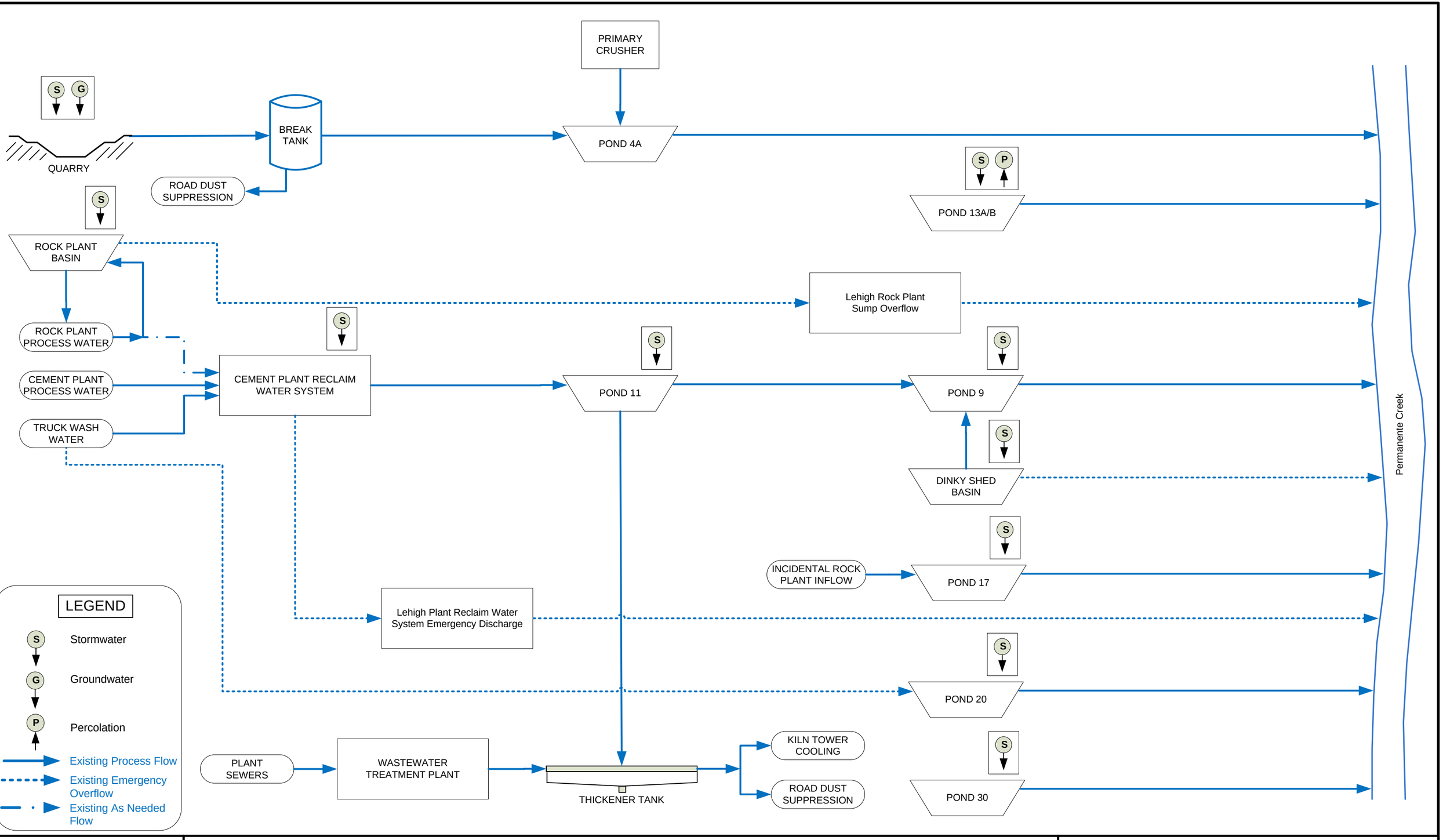
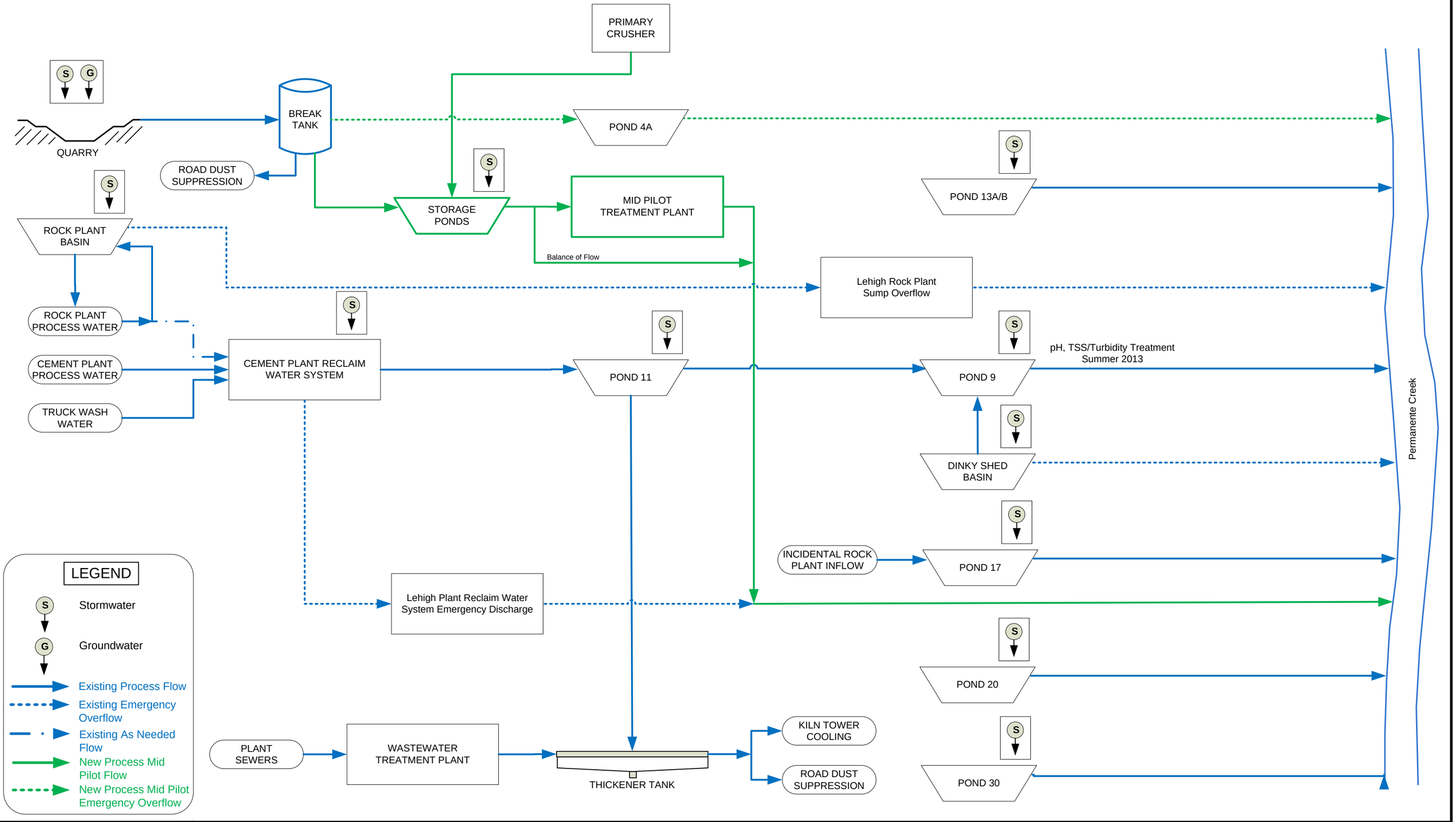
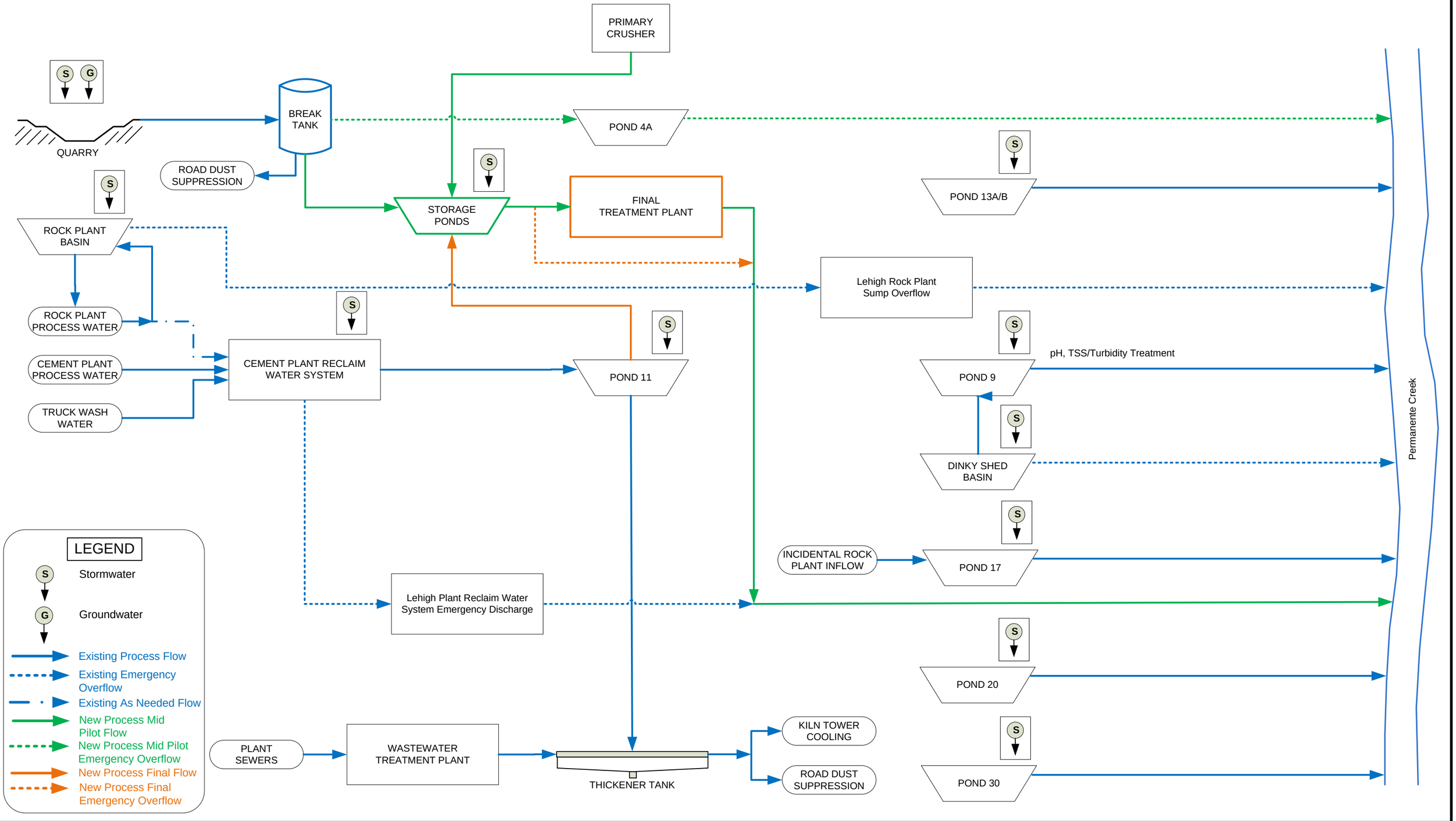


Golder Associates	**PROJECT/REPORT** LEHIGH SOUTHWEST CEMENT COMPANY PERMANENTE QUARRY AND CEMENT PLANT	**PROJECT NO** 063-7109-914
	TITLE LINE DRAWING OF FLOWS, SOURCE OF POLLUTION, AND TREATMENT TECHNOLOGIES CURRENT FLOW CONFIGURATION	**FIGURE** 1



Golder Associates	**PROJECT/REPORT** LEHIGH SOUTHWEST CEMENT COMPANY PERMANENTE QUARRY AND CEMENT PLANT	**PROJECT NO** 063-7109-914
	TITLE LINE DRAWING OF FLOWS, SOURCE OF POLLUTION, AND TREATMENT TECHNOLOGIES MID PILOT (INTERIM) FLOW CONFIGURATION	**FIGURE** 2



Golder Associates	**PROJECT/REPORT** LEHIGH SOUTHWEST CEMENT COMPANY PERMANENTE QUARRY AND CEMENT PLANT	**PROJECT NO** 063-7109-914
	TITLE LINE DRAWING OF FLOWS, SOURCE OF POLLUTION, AND TREATMENT TECHNOLOGIES FINAL FLOW CONFIGURATION	**FIGURE** 3

March 6, 2013 Project No. 063-7109-914

Ms. Dyan Whyte
Assistant Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

RE: Background Monitoring Locations Plan and Reporting, Water Code section 13267 Order No R2-2013-1005, Order Item No. 6, Lehigh Southwest Cement Company, Permanente Facility, 24001 Stevens Creek Boulevard, Cupertino, CA.

Dear Ms Whyte:

Golder Associates Inc. (Golder), on behalf of Lehigh Southwest Cement Company (Lehigh), has prepared and submits this workplan for Background Monitoring for the Lehigh Permanente Cement Plant and Quarry (Site) located at 24001 Stevens Creek Boulevard in Santa Clara County, California. This workplan describes work performed to date, and presents a plan for selecting an appropriate surface water monitoring location for determining background water quality upgradient of the Site. This plan was prepared pursuant to Order Item No. 6 set forth in Water Code section 13267 Order No. R2-2013-1005 issued by the San Francisco Bay Regional Water Quality Control Board (RWQCB) on January 22, 2013.

1.0 WORKPLAN REQUIREMENTS

Order Item 6 requires the following tasks:

- Perform one late season sampling event at the Kaiser House Location between March 15, 2013 and May 1, 2013 at least 48 hours after the most recent storm event.
- Perform one round of sampling at Wild Violet Creek near its confluence with Permanente Creek before May 1, 2013.
- Prepare a Background Monitoring Identification Plan proposing a total of four or more alternative locations to be evaluated for suitability as a background monitoring station for the Site.
- Perform a sampling event, and analyze for the same set of constituents required at discharge locations (also include temperature, hardness, and pH), at each of the four proposed background stations.
  - Provide the analytical results to the RWQCB for review and approval of the recommended background location.
  - Upon approval, sample from the approved background location in accordance with proposed plan.

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2.0 WORK PERFORMED TO DATE

2.1 Background Sampling

On February 22, 2013, Golder performed a reconnaissance and initial sampling event of four possible background monitoring locations. The four locations included the following:

- Kaiser House (RWQCB Location 32) (at least 48 hours had passed since the last storm event)
- Wild Violet Creek (RWQCB Location 33) (near confluence with Permanente Creek)
- Additional Upstream Location on Permanente Creek
- Upper Permanente Creek (RWQCB Location 34)

The background locations are shown on Figure 1 (attachment). The Upper Permanente Creek sample moved downstream approximately 300 feet as noted on Figure 1 because flow in Permanente Creek was subterranean before we reached the RWQCB proposed sample location (Location 34).

Each location was sampled for the following parameters:

- Biological Oxygen Demand
- Chemical Oxygen Demand
- Total Organic Carbon
- Oil and Grease
- Total Suspended Solids
- Total Dissolved Solids
- Turbidity (field and lab)
- pH, Dissolved Oxygen, Electrical Conductivity, Temperature, Oxygen/Reduction Potential, and Residual Chlorine (field measurements)
- Ammonia
- Total Nitrogen
- Total Phosphorus
- Sulfate
- CAM 17 metals (total)
- Hg 1631
- Hardness
- Additional Parameters: Calcium, Magnesium, Manganese, Sodium, Potassium, Total Alkalinity, Bicarbonate, Carbonate, Fluoride, and Nitrate

The work was performed in accordance to Golder's standard sampling SOPs and the Site's Monitoring Plan. One duplicate sample for the above parameter list and one field blank for Hg 1631 were collected. Additionally, a concurrent sample was collected from the new downstream location (RWQCB Sample ID 1) at the property boundary. Monitoring that will be prospectively conducted at the approved background location is summarized in Lehigh's response to Order Item No. 7.

2.2 Background Location Evaluation

In accordance with Order Item 6 requirements, Golder evaluated each background location with respect to the following criteria:

- Ease of access
- Upstream and nearby land use and potential influences
- Geologic conditions
- Likelihood of perennial versus seasonal stream flow

Table 1: Summary of Background Sampling Locations

Background Location	Latitude	Longitude	Ease of Access	Upstream Land Use & Influence	Geology	Perennial Flow?
Kaiser House	37.316008	-122.121809	Good – 30 minute ingress	Influence from WMSA	Greenstone/Shear Zone with some Limestone upstream	Yes
Wild Violet Creek	37.320259	-122.13183	Good – 45 minute ingress	Mostly Native – possible residential land use	Abundant Limestone in headwaters of drainage	Likely[1]
Permanente Creek (AD-U)	37.324497	-122.135966	Moderate – 90 minute ingress	Mostly Native – unpaved road in headwaters, possible residential use	Abundant Limestone in headwaters of drainage	Likely[1]
Upper Permanente Creek	37.325511	-122.140189	Moderate to Difficult – greater than120 minute ingress	Mostly Native – unpaved road in headwaters, possible residential use	Abundant Limestone in headwaters of drainage	Unlikely[2]

Notes:
latitude/longitude coordinates based on handheld GPS unit and are accurate to approximately 30 feet.
1: Assuming an average rainfall year, perennial flow is likely based on observations made during our February 22, 2013 site reconnaissance and our previous experience with the Permanente Creek watershed.
2: Based on observation that flow in Permanente Creek was subterranean approximately 300 feet upstream on February 22, 2013.

3.0 DISCUSSION

Based on the above criteria, and pending the results of the laboratory analytical data, Golder believes that the Wild Violet Creek location is likely the best background monitoring point. It is relatively accessible from an existing pioneered road that extends from the southwestern margin of the West Materials Storage Area (WMSA) down to within 300 - 400 feet of Permanente Creek. The upper portion of the drainage has abundant outcrops of limestone and is generally undisturbed and native. There are two or three residences along the ridge that forms the drainage divide for the headwaters of the Wild Violet Creek drainage; however, we would anticipate that there would not be significant chemical influences from this land use downgradient at the confluence with Permanente Creek.

The second best location is a new background location identified by Golder (AD-U). This location was selected by Golder as the nearest upper Permanente Creek location upgradient of any drainage influences from the WMSA (Figure 1). Limestone outcrops were observed in Permanente Creek in the vicinity of the sampling location, however, the location requires more time to access via hiking up Permanente Creek from the Wild Violet Creek access point.

4.0 CLOSING

Golder will prepare a Background Monitoring Report providing the results of the background sampling event and a recommendation for the preferred background sampling location. This report will be submitted to the RWQCB for review and approval by March 22, 2013.

GOLDER ASSOCIATES INC.

George C. Wegmann
Senior Geologist

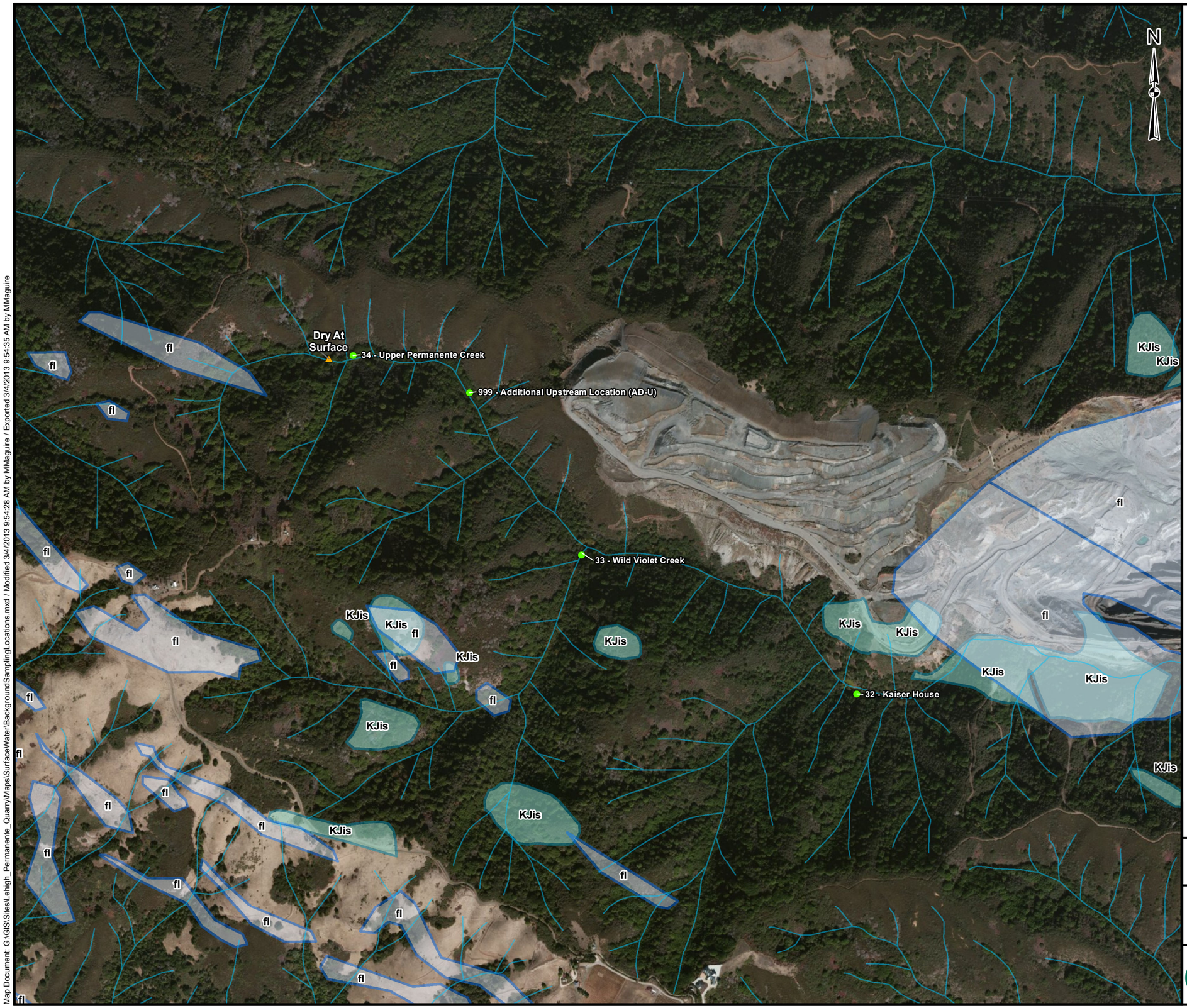
William L. Fowler, PG, CEG
Associate/Program Leader

PROFESSIONAL GEOLOGIST
WILLIAM L. FOWLER
No. 1401
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

cc: Greg Knapp, Lehigh Southwest Cement Company

Nicole Granquist, Downey Brand LLP

Attachments: Figure 1 – Background Monitoring Sample Locations



N

LEGEND

- Background Sample Location
- Stream (BAARI)

Geologic Unit (USGS Regional)

- fl - Limestone

Geologic Unit (Mathieson)

- KJis - Jurassic and Cretaceous Limestone

NOTES

Locations based on Golder's 2/22/2013 site reconnaissance.

REFERENCES

1) Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community
2) USGS geologic map and map database of the Palo Alto 30' X 60' quadrangle, California (MF-2332)
3) Mathieson geologic units from Mathieson, E. L., 1982, Geology of the Permanente Property, Kaiser Corporation, Permanente, California, unpublished report, 34 p.
4) Streams from San Francisco Estuary Institute Bay Area Aquatic Resources Inventory (BAARI) 2011
5) Coordinate System: NAD 1983 StatePlane California III FIPS 0403

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PROJECT

LEHIGH SOUTHWEST CEMENT COMPANY
PERMANENTE QUARRY

TITLE

BACKGROUND MONITORING SAMPLE LOCATIONS

Golder Associates

PROJECT No.		063-7109-913	FILE No.	BackgroundSamplingLocations.mxd	
DESIGN	MM	2/8/2013	SCALE: AS SHOWN	REV. 0	
GIS	MM	3/4/2013			
CHECK	GW	3/4/2013			
REVIEW	WLF	3/4/2013			

FIGURE 1

Map Document: G:\GIS\Sites\Lehigh_Permanente_QuarryMaps\SurfaceWater\BackgroundSamplingLocations.mxd / Modified 3/4/2013 9:54:28 AM by MMaguire / Exported 3/4/2013 9:54:35 AM by MMaguire