

Honorable Mayor and Members  
of the City Council  
City Hall  
Torrance, CA

Members of the Council

**SUBJECT: Community Development – Approve License Agreement with  
Alcoa Inc. for Four (4) Groundwater Monitoring Wells**

**RECOMMENDATION**

Recommendation of the Community Development Director that City Council approve a License Agreement with Alcoa Inc. for four (4) groundwater monitoring wells.

**FUNDING**

No funding required.

**BACKGROUND AND ANALYSIS**

The Los Angeles Regional Water Quality Control Board (LARWQCB) has directed Alcoa Inc., as owner of the property located at 3000 West Lomita Boulevard, to install four (4) monitoring wells. The purpose of the wells is to monitor for possible hydrocarbon migration contamination, which may have migrated from their site.

Alcoa Inc. is requesting to install four (4) groundwater monitoring wells to be located in the public right-of-way. Exhibit "A" of the License Agreement (Attachment A) shows the locations for these proposed wells. Attachment B is a letter from Mission Geoscience, Inc. explaining the need for the proposed groundwater monitoring wells and the necessity for the wells to be located in the street.

The LARWQCB had indicated the potential plume migration southeast of the site must be monitored. Therefore, two (2) of the wells will be installed along the east side of Garnier Street, and the other two (2) wells will be installed along the north side of Skypark Drive.

A copy of the License Agreement with Alcoa Inc. is attached. This Agreement required a \$40,000 bond, a \$855 license fee and a \$1,000,000 liability insurance policy if Alcoa Inc. is not-self-insured. This is a standard agreement used in previous well constructions. It exempts the City from any financial or legal encumbrances associated with the construction, operation, and relocation of actions required as a result of test data obtained from said wells.

The drilling, installation and development of the proposed wells will take approximately one day for each well. The borehole will be ten (10) inches in diameter and approximately 100 feet deep. The monitoring wells will be two (2) inches in diameter. A traffic vault well lid will be set flush with the ground surface and contain a locking watertight cap. A Construction and Excavation Permit will be required by the Community Development Department to regulate work in the public street.

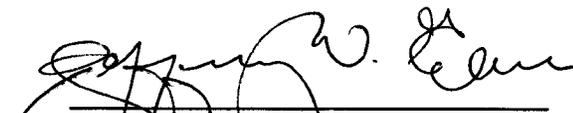
Respectfully submitted,

JEFFERY W. GIBSON  
Community Development Director

By:   
FELIPE SEGOVIA  
Building Regulations Administrator

CONCUR:

  
LeROY J. JACKSON  
City Manager

  
JEFFERY W. GIBSON  
Community Development Director

Attachments:           A. License Agreement with Exhibit "A"  
                                  B. Mission Geoscience, Inc. Letter  
IGM/cks2299

**LICENSE AGREEMENT FOR MONITORING WELLS**

**THIS AGREEMENT**, made and entered into in quadruplicate as of this \_\_\_\_\_ day of \_\_\_\_\_, 2010 in the City of Torrance by and between the **CITY OF TORRANCE**, a municipal corporation, hereinafter called the "City", and **ALCOA, INC.**, a Pennsylvania Corporation, hereinafter called "Grantee";

**WHEREAS**, Grantee desires to drill four (4) monitoring wells on a City street easement at locations shown on attached map (Exhibit A); and

**WHEREAS**, the location and general description of the wells is satisfactory to the City; and

**WHEREAS**, said monitoring wells is for the purpose of determining the extent of, if any, hydrocarbon migration from the Alcoa Fastening System facility located at 3000 West Lomita Boulevard in the City of Torrance hereinafter called "Site".

**NOW, THEREFORE**, the parties hereto agree as follows:

The City hereby grants to Grantee for the term of ten (10) years from the effective date of this Agreement, subject to extensions at the discretion of the City, subject, further, to all the special and general provisions attached hereto and made a part hereof, the right and privilege to construct, erect, maintain, operate, repair, renew, remove and abandon monitoring wells for determining the extent of hydrocarbon migration in the City of Torrance as described and shown on Exhibit "A" attached hereto and made a part thereof.

**GENERAL PROVISIONS**

- I. **LOCATION OF WELLS** - The wells shall be located as described and shown in Exhibit "A".
  
- II. **CONSTRUCTION OF WELLS**
  - A. **Time of Construction.** The Grantee, in good faith, shall commence the work of constructing the wells within 30 days from the date of this Agreement and shall complete such construction within 30 days after commencing construction.
  
  - B. **As-Built Drawings and Maps.** Within ninety (90) days following the date in which any facilities have been constructed under this Agreement, the Grantee shall file as-built drawings and maps in such form as may be required by the City, showing accurately the location and size of all its facilities then in place, and shall, upon installation of any additional facilities, or upon removal, change or abandonment of all or any portion thereof, file revised as-built drawings and maps showing the location and size of all such additional, removed or abandoned facilities as of that date.

- C. Other Approvals. The installation and operation of the wells shall be to existing requirements of the City of Torrance.
- C. Installation and Testing of Wells. The wells shall be installed, sampled and tested in substantial accordance with the Mission Geoscience Inc. Off-Site Well Installation Work Plan dated December 3, 2009 prepared for Alcoa, Inc., for assessment as may be amended or modified with approval.

### III. CONFORMANCE REQUIREMENTS

- A. Conformance with State Codes. The wells and appurtenances shall be constructed in accordance with all State of California Standards for the construction of wells as set forth in State laws, rules or regulations.
- B. Conformance with City Ordinances and Permits. The wells and appurtenances shall be constructed in conformity with all City ordinances, rules or regulations in effect at the time of construction, or as prescribed by the City.
- C. Conformance with Regulations and Requirements of Boards and Agencies. The wells shall be constructed and maintained in accordance with standards, regulations, or existing requirements of the Los Angeles Regional Water Quality Control Board and the State of California Department of Health Services.
- D. In the event Grantee assumes control of the Site, Grantee will maintain the grounds and improvements on the Site in a safe, clean and neat manner to the reasonable satisfaction of the Environmental Division of the Community Development Department of the City. Any containers stored on the Site must be screened from public view.

### IV. CLEANUP OF BREAKS AND LEAKS

If any portion of any street shall be damaged by reason of Grantee's construction, operation or maintenance of any facility constructed or maintained under this Agreement, or if any street, sidewalk, sewer, storm drain or other facility be contaminated with waste water, gasoline or other substance due to operations by the Grantee, the Grantee shall, at its own expense, immediately repair or clean up or cause to be repaired or cleaned up any such damage or contamination and put such street, sidewalk, sewer, storm drain or other facility in substantially as good condition as it was before such contamination, to the reasonable satisfaction of the City. Such cleanups shall be accomplished in a timely manner, with as little public disruption as possible.

V. **EMERGENCY CREWS**

During the term of this Agreement, the Grantee shall provide within a twenty-four (24) hour notification, crews for the purpose of repairs, cleanup, preventing or minimizing serious immediate damage or the threat of damage to people or the environment in the event of an emergency resulting from an earthquake, act of war, civil disturbance, flood, leakage or other cause.

VI. **REARRANGEMENT OF FACILITIES**

- A. Expense of Grantee. Whenever, during the existence of this Agreement, the City shall change the grade, width, or location of any street or improve any street in any manner, including the laying of any sewer, storm drain, conduits, gas, water or other pipes owned or operated by the City or any other public agency, or construct any pedestrian tunnels, or other work of the City (the right to do all of which is specifically reserved to the City without any admission in its part that it would not otherwise have such rights) and such work shall, in the opinion of the City, render necessary any change in the position or location of any facilities of the Grantee in the street, the Grantee shall, at its own cost and expense, do any and all things to effect such change in position or location, in conformity with the written notice of the Community Development Director as provided in Paragraph D below.
- B. Expense of Others. When such change in construction or work is done for the accommodation of any person, firm or corporation, the cost of such rearrangement shall be borne by the accommodated party. Such accommodated party, in advance of such rearrangement, shall (a) deposit with the Grantee either cash or a corporate surety bond in an amount, as in the reasonable discretion of the Grantee shall be required to pay the costs of such change in work; and (b) shall execute an instrument agreeing to indemnify, defend and hold harmless the Grantee from any and all damages or claims caused by such rearrangement.
- C. Rearrangement of the Facilities of Others. Nothing in this Agreement contained shall be construed to require the City to move, alter or relocate any of its facilities upon said streets, at its own expense, for the convenience, accommodation or necessity of any other public utility, person, firm or corporation, or to require the City or any person, firm or corporation now or hereafter owning a public utility system of any type or nature, to move, alter or relocate any part of its system upon said streets for the convenience, accommodation or necessity of the Grantee. If the wells cannot be located as described in Exhibit "A", Grantor shall furnish Grantee with another reasonable acceptable location for such wells in the immediate vicinity.
- D. Notice. The Grantee shall be given not less than thirty (30) days written notice of any change or relocation of facilities which the Grantee is required to make

hereunder. Such notice shall specify in reasonable detail the work to be done by the Grantee and shall specify the time that such work is to be accomplished. In the event that the City shall change the provisions of any such notice given to the Grantee, the Grantee shall be given an additional period not less than thirty (30) days to accomplish such work.

## **VII. REMOVAL OR ABANDONMENT OF FACILITIES**

- A. Application to City. At the expiration, revocation or termination of this Agreement or of the permanent discontinuance of the use of its facilities or any portion thereof, the Grantee shall, within thirty (30) days thereafter, make a written application to the City for authority (as determined by the Grantee) either (a) to abandon all, or a portion, of such facilities in place; or (b) to remove all, or a portion, of such facilities. Such application shall describe the facilities desired to be abandoned or removed by reference to the map or maps required by Article II, Section B, of this Agreement and shall also describe with reasonable accuracy the relative physical condition of such facilities.
- B. Determination of City. The City shall determine whether such abandonment or removal which is thereby proposed may be effected without detriment to the public interest or under what conditions such proposed abandonment or removal may be safely effected. The City shall then notify the Grantee in writing within 30 days following its receipt of Grantee's application, and according to such reasonable conditions as shall be specified that the Grantee may either effect such abandonment or such removal shall, as appropriate, within ninety (90) days thereafter, either:
1. Remove all or a portion of such facilities; or
  2. Abandon in place all or a portion of such facilities, as set forth in the Community Development Director's order.
- C. Failure to Properly Abandon. If any facilities to be abandoned in place subject to prescribed conditions shall not be abandoned in accordance with all such conditions, then the City may make additional appropriate orders, including, if deemed desirable, an order that the Grantee shall remove all such facilities in accordance with applicable requirements. In the event the Grantee shall fail to remove any facilities which the Grantee is obligated to remove in accordance with such applicable requirements within such time as may be prescribed by the City, then the City may remove or cause to be removed such facilities at the Grantee's expense and the Grantee shall pay to the City the actual cost thereof plus the current rate of overhead being charged by the City for reimbursable work.

## **VIII. INDEMNIFICATION BY GRANTEE**

A.

Grantee will indemnify, defend, and hold harmless City, the City Council, each member thereof, present and future, its officers, agents and employees from and against any and all liability, expenses, including defense costs and legal fees, and claims for damages whatsoever, relating to Grantee's activities under this Agreement, including, but not limited to, those arising from breach of contract, bodily injury, death, personal injury, property damage, loss of use, or property loss however the same may be caused and regardless of the responsibility for negligence. The obligation to indemnify, defend and hold harmless includes, but is not limited to, any liability or expense, including defense costs and legal fees, arising from the negligent acts or omissions, or willful misconduct of Grantee, its officers, employees, agents, subcontractors or vendors. It is further agreed, Grantee's obligations to indemnify, defend and hold harmless will apply even in the event of concurrent negligence on the part of City, the City Council, each member thereof, present and future, or its officers, agents and employees, except for liability resulting solely from the negligence or willful misconduct of City, its officers, employees or agents. Payment by City is not a condition precedent to enforcement of this indemnity. In the event of any dispute between Grantee and City, as to whether liability arises from the sole negligence of the City or its officers, employees, agents, subcontractors or vendors, Grantee will be obligated to pay for City's defense until such time as a final judgment has been entered adjudicating the City as solely negligent. Grantee will not be entitled in the event of such a determination to any reimbursement of defense costs including but not limited to attorney's fees, expert fees and costs of litigation.

B. Grantee shall indemnify and hold harmless the City, its officers, agents and/or employees from and against all claims, costs, expenses, actions, lawsuits, expenses of response, remediation, or cleanup costs, or damages and liability of any kind whatsoever, including but not limited to attorney fees and expenses, directly or indirectly arising out of or attributable to the release or threatened release of a hazardous substance emanating from the Site. This provision shall not apply to any action brought by a third party against the City. Grantee expressly covenants, warrants and promises not to sue the City, its officers, agents and/or employees in any action for contribution or indemnification for any remediation cleanup costs or response which Grantee undertakes as a result of any release of hydrocarbons from the Site.

This indemnity shall continue in full force and effect, and shall survive the termination of this agreement.

## IX. INSURANCE REQUIREMENTS

### A. INSURANCE

Licensee shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from, or in connection with, the use of City of Torrance property thereunder by the Licensee, its' agents, representatives, employees or subcontractors. The insurance must be full coverage, or if self-insured, such self insurance must be approved by the City's Risk Manager.

1. Automobile Liability, including owned, non-owned and hired vehicles, with at least the following limits of liability.
  - a. Primary Bodily Injury with limits of at least \$250,000 per person, \$500,000 per occurrence and;
  - b. Primary Property Damage with limits of at least \$100,000 per occurrence, or;
  - c. Combined single limits of at least \$500,000 per occurrence.
2. General Liability including coverage for premises, products and completed operations, independent contractors/vendors, explosion, collapse and underground hazards, and contractual obligations with combined single limits of at least \$1,000,000 per occurrence.
3. Pollution Liability with coverage for:
  - a. Bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death;
  - b. Property damage including physical injury to or destruction of tangible property including the resulting loss of use thereof, clean-up costs, and the loss of use of tangible property that has not been physically injured or destroyed;
  - c. Defense, including costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages, and
  - d. Losses caused by pollution conditions that arise from the operations of the licensee described under the Scope of Services of this contract with combined single limits of at least \$1,000,000 per occurrence.

4. Workers' Compensation with limits as required by the State of California and Employers Liability with limits of at least \$500,000.

B. ADDITIONAL INSURED

The City of Torrance, Los Angeles County-Torrance Civic Center authority, Torrance Public Facilities Building Corporation, Torrance Transit System, Redevelopment Agency of the City of Torrance, Torrance Municipal Water Department, elected officials, officers, agents, employees, volunteers, and members of boards and commissions must be named as additional insureds with respect to liability arising out of the operation or property of Grantee.

C. SUFFICIENCY OF INSURERS

Insurance required by this contract/purchase order will be satisfactory only if issued by companies rated "B+" or better in the most recent edition of Best's Key Rating Guide, and only if they are of a financial category of a "VII" or better.

D. INCREASE IN REQUIREMENTS

Such insurance shall be maintained by the Grantee for the life of Agreement, and each year on the anniversary of this franchise, Grantee will provide updated evidence that such insurance is in force. The City has the right during the term of this Agreement to amend the insurance requirements to increase the amount and scope of coverage. The City covenants that it will not exercise such right in an unreasonable manner.

X. DEFAULT

- A. Effect of Default. In the event that the Grantee shall default in the performance of any of the terms, covenants and conditions herein and such default is curable, the City shall give written notice to the Grantee of such default. In the event that the Grantee does not commence the work necessary to cure such default within thirty (30) days after such notice is sent or prosecute such work diligently to completion, the City may declare this Agreement forfeited. Upon giving written notice thereof to the Grantee, this Agreement shall be void and the rights of the Grantee hereunder shall terminate and the Grantee shall execute an instrument of surrender and deliver same to the City.
- B. Force Majeure. In the event Grantee is unable to perform any of the terms of this Agreement by reason of strikes, riots, acts of God, acts of public enemies or other such cause beyond its control, it shall not be deemed to be in default or have forfeited its rights hereunder if it shall commence and prosecute such performance with reasonable promptness as soon as possible to do so.

- C. Cumulative Remedies. No provision herein made for the purpose of securing the enforcement of the terms and conditions of this Agreement shall be deemed an exclusive remedy, or to afford the exclusive procedure, for the enforcement of said terms and conditions, but the remedies and procedures herein provided, in addition to those provided by law, shall be deemed to be cumulative.

## XI. SCOPE OF RESERVATION

The enumeration herein of specific rights reserved shall not be construed as exclusive or as limiting and general reservation herein made or as limiting such rights as the City may now or hereafter have in law.

## XII. NOTICE

All notices, requests, demands, or other communications under this Agreement must be in writing. Notice will be sufficiently given for all purposes as follows:

- A. **Personal delivery**. When personally delivered to the recipient: notice is effective on delivery.
- B. **First-class mail**. When mailed first class to the last address of the recipient known to the party giving notice: notice is effective three mail delivery days after deposit in a United States Postal Service office or mailbox.
- C. **Certified mail**. When mailed certified mail, return receipt requested: notice is effective on receipt, if delivery is confirmed by a return receipt.
- D. **Overnight delivery**. When delivered by an overnight delivery service, charges prepaid or charged to the sender's account: notice is effective on delivery, if delivery is confirmed by the delivery service.
- E. **Facsimile transmission**. When sent by fax to the last fax number of the recipient known to the party giving notice: notice is effective on receipt, provided that (i) a duplicate copy of the notice is promptly given by first-class or certified mail or by overnight delivery, or (ii) the receiving party delivers a written confirmation of receipt. Any notice given by fax will be deemed received on the next business day if it is received after 5:00 p.m. (recipient's time) or on a nonbusiness day. Addresses for purpose of giving notice are as follows:

Grantee:

Ronald M. Morosky  
Alcoa Inc.  
201 Isabella Street  
Pittsburgh, PA 15212

Fax Number: 412-553-4822  
E-Mail: Ronald.morosky@alcoa.com

City of Torrance:

City Clerk  
3031 Torrance Boulevard  
Torrance, CA 90503  
Fax: 310-618-2931

Any correctly addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified will be deemed effective as of the first date the notice was refused, unclaimed or deemed undeliverable by the postal authorities, messenger or overnight delivery service.

Any party may change its address or fax number by giving the other party notice of the change in any manner permitted by this Agreement.

### **XIII. SUCCESSORS**

The terms herein shall inure to the benefit of or shall bind, as the case may be, the successors and assigns of the parties hereto.

### **XIV. ACCEPTANCE OF AGREEMENT**

This Agreement is entered and shall be held and enjoyed only upon the terms and conditions herein contained.

### **XV. AGREEMENT TO BE STRICTLY CONSTRUED AGAINST GRANTEE**

The Agreement is granted upon each and every condition herein contained and shall ever be strictly construed against Grantee. Nothing shall pass hereby unless it be granted in plain and unambiguous terms. Each of said conditions is a material and essential condition to the granting of this Agreement.

### **XVI. SPECIAL PROVISIONS**

- A. Bond. This Agreement is granted on the condition that the Grantee has now and shall at all times during the life of this Agreement keep on file with the City a bond running to the City in the sum of Ten Thousand Dollars (\$10,000) per well, executed by a reputable indemnity company entitled to do business in the State of California. The said Bond shall contain the condition that the Grantee shall well and truly observe, fulfill and perform each and every term and condition of this Agreement, and that in case of any breach of condition of said Bond the whole amount of the sum therein named shall be taken and deemed to be liquidated damages and shall be recoverable from the principal and from the sureties upon

said Bond. The provisions of this paragraph shall not exempt the Grantee from compliance with any of the laws of the City in force during the term hereof, which require the Grantee to post a Bond other than the bond required by this paragraph.

- B. Fees. As reimbursement for administrative costs in the execution of this Agreement, the Grantee shall pay to the City in lawful money of the United States a fee of Six Hundred Dollars (\$600) and Eighty-Five Dollars (\$85) for each additional well. This payment shall be made to the City prior to the signing of this Agreement and if made by check shall be made payable to the City of Torrance.
- C. Independent Laboratory Analysis. Grantee agrees to have all chemical analyses of samples taken from the wells, which are the subject of this Agreement, performed by qualified independent laboratories which are mutually acceptable to the Grantee and to the City. Grantee also agrees to provide, on request, copies of all analytical test reports to the City as soon as said reports are available.

**CITY OF TORRANCE**  
A Municipal Corporation

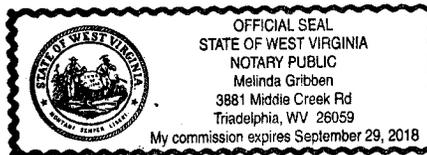
**ALCOA, INC.**  
A Pennsylvania Corporation

By \_\_\_\_\_  
Frank Scotto  
Mayor of the City of Torrance

By Kirk J. Gribben  
Kirk J. Gribben  
Manager, Remediation Services

**ATTEST:**

\_\_\_\_\_  
Sue Herbers  
City Clerk of City of Torrance



**APPROVED AS TO FORM:**

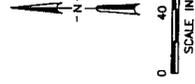
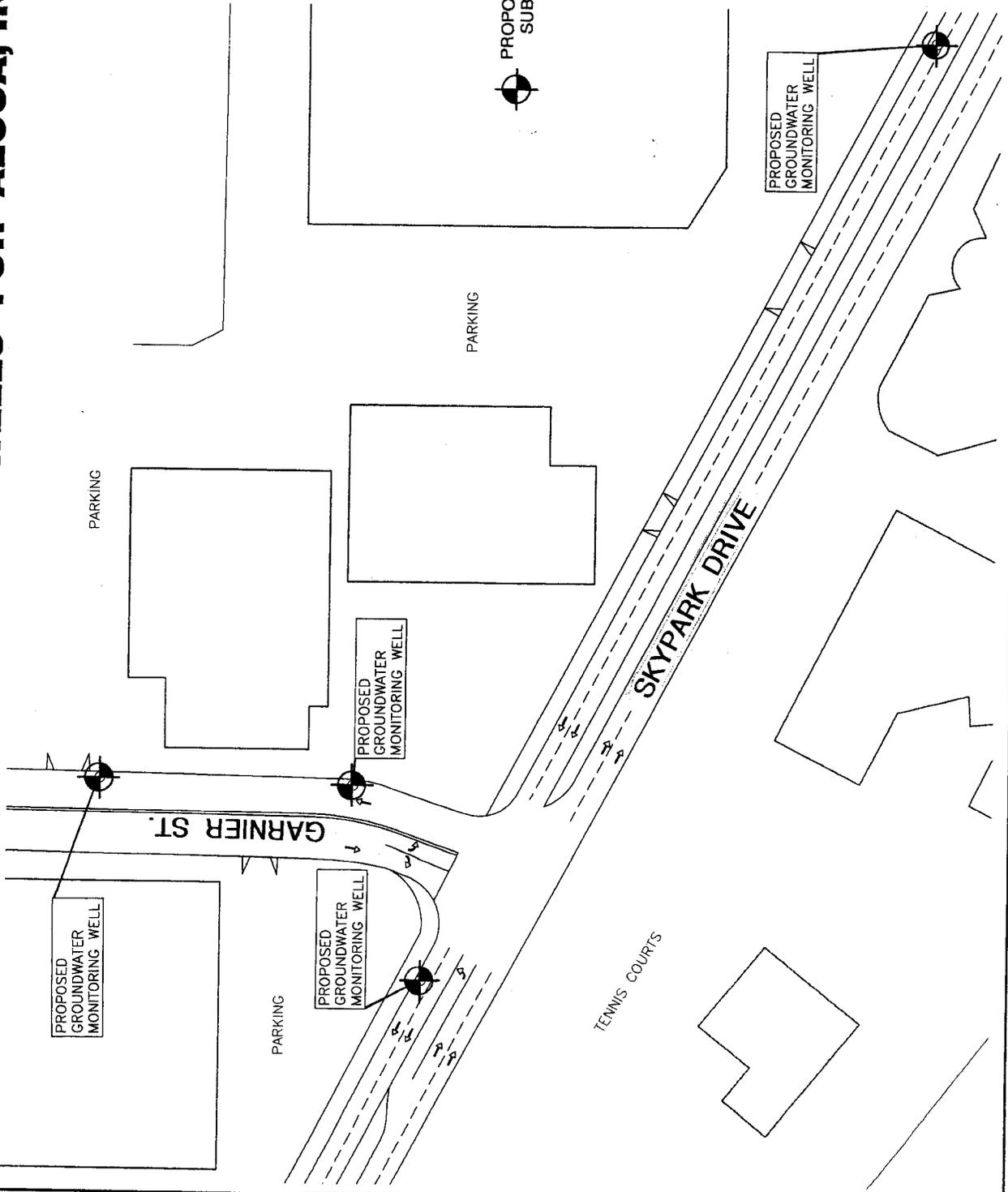
JOHN L. FELLOWS III  
City Attorney

Melinda Gribben

By \_\_\_\_\_  
Patrick Sullivan  
Deputy City Attorney

Attachment: Exhibit A

# PROPOSED GROUNDWATER MONITORING WELLS FOR ALCOA, INC.

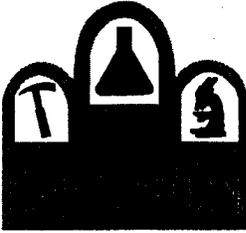


**MISSION GEOSCIENCE, INC.**  
ENVIRONMENTAL & GEOTECHNICAL CONSULTANTS

**MAP SHOWING PROPOSED OFF-SITE  
WELL LOCATIONS**

3000 WEST CENTRAL BOULEVARD  
TORRANCE, CALIFORNIA

EXHIBIT 1



## **GEOSCIENCE, INC.**

### **ENVIRONMENTAL & GEOTECHNICAL CONSULTANTS**

March 8, 2010

Mr. Issa G. Malki  
Associate Civil Engineer, Community Development Department  
**City of Torrance**  
3031 Torrance Boulevard  
Torrance, California 90503

**RE: License Agreement to Install Four Groundwater Monitoring Wells within Public Right-of-Way  
Alcoa Inc. - AFS Torrance Site  
3000 West Lomita Boulevard, Torrance, California  
MISSION File Number 03-451**

Dear Mr. Malki:

On behalf of Alcoa Inc., (Alcoa) as Grantee, Mission Geoscience, Inc. (MISSION) is submitting this request for approval of a License Agreement by the City of Torrance (the City) for the installation of four wells on City property. This work is being done in compliance with requirements of the Corrective Action Consent Agreement SRPD 05/06 – SCC 4345 (CA) between Alcoa and the Cal-EPA Department of Toxic Substances Control (DTSC), pursuant to which Alcoa has been directed to investigate groundwater quality off-Site and down-gradient of the Alcoa Fastening Systems (AFS) facility located at 3000 West Lomita Boulevard in Torrance California (the Site).

The License Agreement which Alcoa completed for the City's review, for accessing and installing four wells on the City property, is included as Attachment A, including Exhibit A that provides a plan view of the proposed well locations. The required Bond in an amount of \$40,000 (\$10,000 per well) is included as Attachment B along with an insurance certificate in the amounts required by the Agreement.

The rationale for placement of the four off-Site wells is presented in MISSION's Off-Site Well Installation Workplan dated December 3, 2009, which is included as Attachment C.

**License Agreement to Install Four Groundwater Monitoring Wells within Public  
Right-of-Way  
3000 West Lomita Boulevard, Torrance, California  
MISSION File Number: 03-451**

The wells are proposed to be located such that one well will be at the southeast corner of the Skypark Drive-Garnier Avenue intersection, one well will be along the east side of Garnier Street, and two wells will be along the north side of Skypark Drive. Construction details are contained in the Workplan. DTSC approved implementation of this Workplan in a letter dated December 21, 2009 a copy of which is included as Attachment D.

Unless otherwise directed, the proposed groundwater monitoring wells will be permitted through the Los Angeles County, Department of Public Health, Drinking Water Program, after the attached License Agreement with the City of Torrance is fully executed and prior to initiating field activities.

It is our understanding that you will return five (5) copies of the executed License Agreement, upon receipt of which Alcoa will sign and then provide the required permit fee of \$855 (\$600 for the first well and \$85 each for the other three wells).

Should you have any questions or require additional clarification, please contact the undersigned at your convenience.

Respectfully submitted,  
**MISSION GEOSCIENCE, INC.**



Suman Ghosh, Ph.D.  
Project Hydrogeologist

cc: Ron Morosky, Alcoa  
Jeff Benz, Alcoa

**Attachments:**

- A City of Torrance License Agreement
- B Bond and Insurance Certificate
- C Off-Site Well Installation Workplan dated December 2, 2009
- D DTSC Approval Letter dated December 21, 2009



Alcoa Corporate Center  
201 Isabella Street  
Pittsburgh, PA 15212-5858 USA  
Tel: 1 412 553 1859  
Fax: 1 412 553 4822

December 2, 2009

Mr. Jermaine Nora  
Hazardous Substances Scientist  
Tiered Permitting Corrective Action Branch  
Department of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, California 90630

**RE: Transmittal – Off-Site Well Installation Workplan  
Alcoa Fastening Systems – 3000 W. Lomita Blvd. Torrance, CA  
Corrective Action Consent Agreement  
SRPD 05/06 SCC 4345**

Dear Mr. Nora:

Please find enclosed one (1) signed/stamped original and one (1) pdf copy on CD of the above-referenced workplan that provides information for activities planned to be performed regarding the continued FI groundwater assessment. The work will be performed by or under the supervision of Mission Geoscience, Inc., and will begin upon receipt of Department of Toxic Substances Control (DTSC) approval.

If you or others at DTSC have any comments or questions please let me know.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ronald M. Morosky", with a horizontal line underneath.

Ronald M. Morosky  
Site Manager

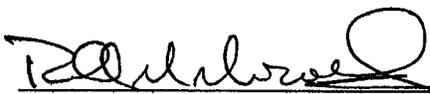
Enc.

cc:

J. Benz – Alcoa, w/enc.  
J. Geroch – DTSC, w/o enc.  
E. Hendrix – Mission, w/enc.

## CERTIFICATION

I certify that the information contained in or accompanying this submittal is true, accurate and complete. As to those portions of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared at my direction in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted.

Signature:   
Name: Ronald M. Morosky  
Title: Site Manager  
Date: December 1, 2009



**MISSION GEOSCIENCE, INC.**

**ENVIRONMENTAL & GEOTECHNICAL CONSULTANTS**

2082 MICHELSON DRIVE, SUITE 400 • IRVINE, CA 92612 • TEL: 949-955-9086 • FAX: 949-955-9088

## **OFF-SITE WELL INSTALLATION WORKPLAN**

**3000 West Lomita Boulevard, Torrance, California**  
Corrective Action Consent Agreement (CA) SRPD 05/06 – SCC 4345  
**MISSION File Number 03-451**  
**December 3, 2009**

In accordance with recent discussions and correspondence with the Cal-EPA Department of Toxic Substances Control (DTSC) Mission Geoscience, Inc. (MISSION) has developed this workplan regarding installation of groundwater monitoring wells down-gradient and off-Site of the Alcoa Fastening System (Alcoa) facility located at 3000 West Lomita Boulevard in Torrance, California (the Site). MISSION has also provided herein the off-Site City of Torrance right-of-way access requirements and procedure for well installation on City property.

This scope of work provides continued compliance with the Corrective Action Consent Agreement (CA) SRPD 05/06 – SCC 4345 Facility Investigation (FI) requirements and adheres to the plans presented in the *FI Workplan* prepared by MISSION (dated August 23, 2006) and more recently as presented in the *Supplemental Groundwater Investigation Report*, prepared by MISSION (dated April 29, 2009). The primary objective of this workplan is to characterize subsurface conditions (e.g., water levels and volatile organic compound [VOC] concentrations) at locations downgradient of the Site.

### **OFF-SITE WELL LOCATIONS**

Four off-Site *groundwater monitoring* wells are proposed to be installed in the downgradient direction to the southeast of the Site. These wells will screen the upper portion of the Gage Aquifer.

In order to evaluate reasonable off-Site well locations, MISSION used WinTran<sup>®</sup> groundwater modeling software and Site-specific input parameters. The WinTran<sup>®</sup> simulation indicates that the 1,000 micrograms/liter VOC isopleth has not yet crossed the southeast side of Skypark Drive and Garnier Avenue intersection.

The model simulation results are presented on attached Figure 1 with inferred PCE isoconcentration contours showing the simulated off-Site downgradient isopleths. Based on the simulation results, it is proposed to install one well at the southeast corner of the Skypark Drive and Garnier Avenue intersection, one well along the east side of Garnier Street, and two wells along the north side of Skypark Drive. The proposed well locations are shown on Figure 1 and proposed construction details are shown on Figure 2.

### **WELL INSTALLATION PROCESS**

The proposed wells will be drilled, constructed, and developed in accordance with *California Well Standards* (Department of Water Resources Bulletin 74-90) and prevailing DTSC Guidance Documents for groundwater characterization. The well installation permit will be obtained from the County of Los Angeles Department of Health Services (DHS) before field operations commence. Any required permits will be obtained from the City of Torrance. An air knife will be used to carefully bore through the first eight feet of soil at the proposed drilling locations to identify any underground utilities.

At the proposed well locations, a boring will be advanced using a conventional truck-mounted Sonic Drill Rig operated by Boart-Longyear, Inc. The sonic drilling technique was selected by MISSION because: a) it involves no drilling fluids introduced into the formation or aquifer, thus promoting a cleaner well completion and development; b) it advances a casing that acts as a conductor against the potential heaving sands previously encountered on-Site in the upper Gage Aquifer; and c) it provides for collection of a high quality continuous soil core.

Soil core samples will be extracted at 10-foot intervals through a 10-foot length core barrel sampler inserted inside the conductor casing. After each sampling run, the core barrel will be raised and the core samples retrieved and placed in cylindrical plastic containers. The 10-foot long inner core barrel sections will be inserted following advancement of each interval. The process of alternating sample collection and advancing the drill casings will be repeated until the target depth of approximately 100 feet below ground surface is reached.

Each 10-foot core sample will be visually checked, screened for vapor-phase VOCs with a photoionization detector (PID), and examined/logged by on-Site experienced MISSION staff under the direct supervision of a California Registered Geologist and Hydrogeologist, in accordance with the Unified Soil Classification System (USCS). No soil samples for laboratory analysis are planned for collection, since the drilling locations are significantly downgradient from the known on-Site source(s). Nevertheless, the presence of VOC-

impacted soil vapor will be semi-quantitatively assessed in the zone above the phreatic surface using the PID.

All pertinent information from the borings and drilling progress will be recorded on field sheets by an experienced MISSION field geologist.

The well casings will be constructed of 2-inch I.D. polyvinyl chloride (PVC) Schedule 40 casing and 0.010-inch slotted well screen, with a sediment trap at the bottom. The wells shall be constructed by inserting the PVC well casing through the outer sonic rig drill casing, and gradually raising the drill casing as filter material and well sealants are placed within the annular space; depths will be verified during construction by sounding with a clean weighted tape. To ensure that the wells will be plumb, the entire PVC well casing string will be suspended roughly ½ foot above the base of the borehole. See Figure 2 for proposed construction details.

Based on MISSION's experience with Gage Aquifer lithology during installation of other wells at this Site, it is estimated that Lonestar<sup>®</sup> No. 2/12 silica sand (or equivalent) will be adequate for the annular filter pack material in the annular space. To minimize bridging, the filter pack materials will be introduced into the annular space through a tremie pipe assembly. The filter pack shall extend from total depth to a minimum of three feet above the top of the well screen. The filter pack shall be surged prior to well seal placement, to ensure its proper settlement.

A 5-foot thick (minimum) hydrated bentonite pellet well seal will be placed above the filter pack. After the placement of the filter pack and the seal, the annulus shall then be backfilled with a 95% cement-5% bentonite grout mixture to a depth of 3 to 5 feet below the ground surface. The remainder of the annulus will be backfilled with cement to anchor the surface completion. The well head will be finished with a flush-mounted traffic-rated vault and locking casing cap.

Each new well casing will initially be pre-developed during construction, prior to setting the well seal, to create an effectively sorted filter pack around the well screen by removing mobile fines, silts, and clays in and around the borehole using a combination of decontaminated steel bailer, swabbing tool, surge blocks, and/or electric submersible pump. Once the wells have been adequately swabbed and the filter pack is settled, the well seals and upper annular casing seal will be placed by tremie.

The completed wells will subsequently be fully developed using a steel bailer, swabbing tool, surge blocks, and/or electric submersible pump until visible sediment is removed from the well and turbidity conditions stabilize, as determined using either a Horiba U-10<sup>®</sup> or YSI water quality meter.

All development water will be placed in DOT approved 55-gallon drums which will be labeled and stored on-Site pending characterization per CCR Title 22 criteria, with anticipated disposition off-Site at an approved facility.

Each well will be surveyed and then incorporated into the Site groundwater monitoring program. Results of the well installation activities will be provided in a report to the DTSC.

#### **PERMITTING REQUIREMENTS FROM CITY OF TORRANCE**

MISSION has contacted the appropriate permitting officials in the City of Torrance and was told that MISSION should contact Mr. Issa Malki, the head of the Engineering Division of the City Community Development Department, and submit a letter explaining the scope of work and justification along with any supporting regulatory agency requirements/approvals. This submittal should also include a map showing proposed well locations and well construction details.

After Mr. Malki's approval, a Monitoring Well License Agreement (Agreement) will be sent to Alcoa from the City of Torrance. The Agreement will need to be notarized and submitted to the City of Torrance along with the corresponding fee of \$600 for the first proposed well and \$85 for the second well. Once submitted, it will need to be approved by the Torrance City Council by vote, then once approved, a permit application for construction and excavation will be sent to Alcoa for further filing with an application fee of approximately \$650.

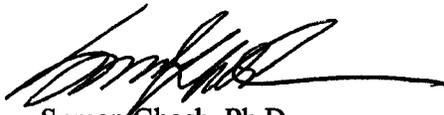
City Council approval typically takes approximately two to six months, while approval of the permit application typically requires a few weeks. Based on MISSION's recent experience in obtaining a construction permit from the City of Torrance for the Site soil vapor extraction system, six to nine months from the date of the initial letter submittal (that includes written DTSC approval of the workplan) seems a reasonable time projection for obtaining final access to the City of Torrance right-of-way.

**CLOSURE**

MISSION looks forward to completing this work and should you have any questions or require additional clarification, please contact the undersigned at your convenience.

Respectfully Submitted,

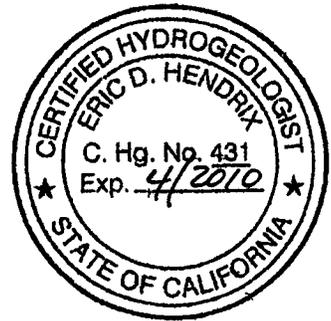
**MISSION GEOSCIENCE, INC.**



Suman Ghosh, Ph.D.  
Project Hydrogeologist



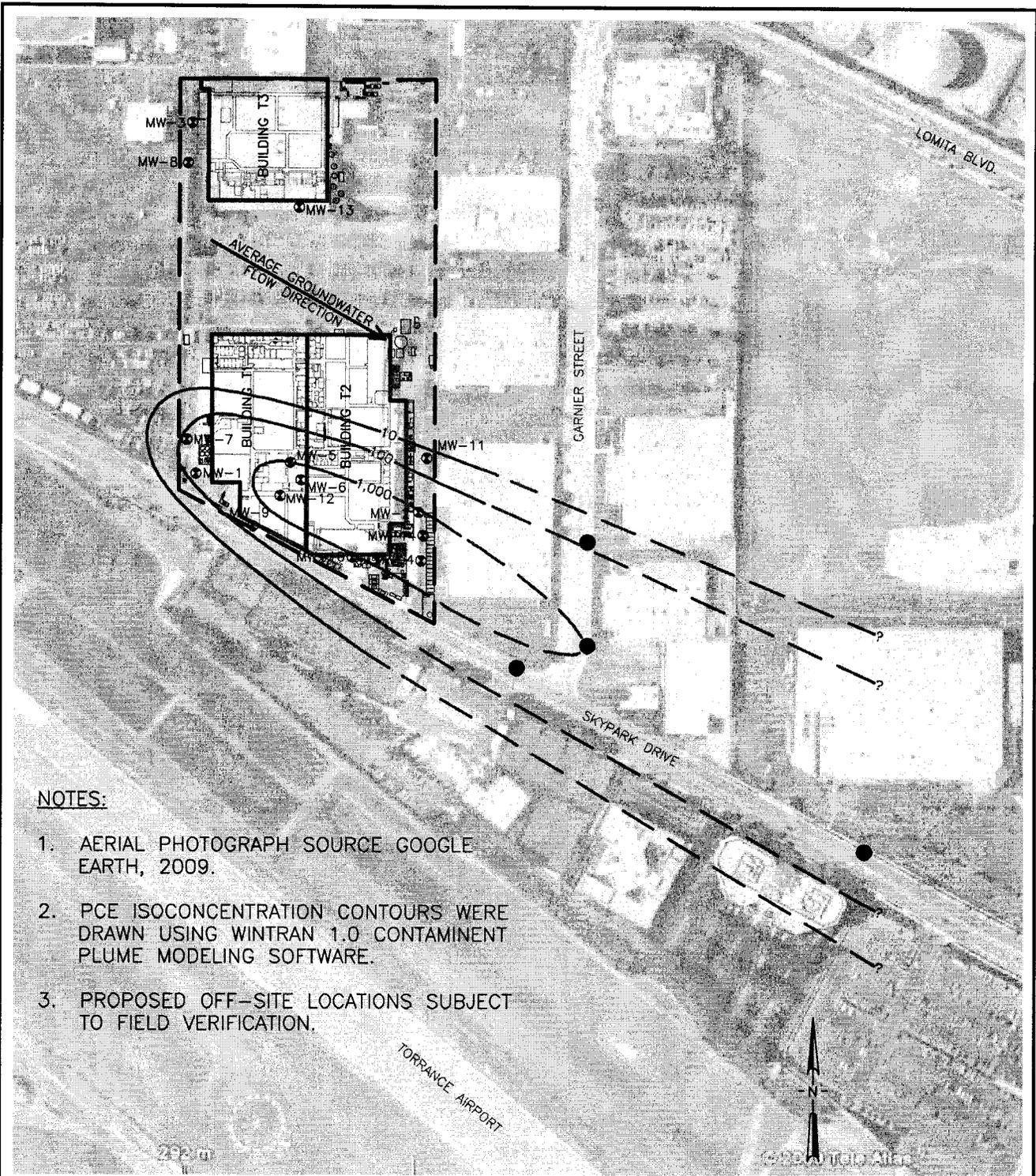
Eric D. Hendrix, CEG 1531, CHg 431  
Principal Hydrogeologist



**Attachments:**

- Figure 1 Map Showing Projected PCE Concentrations And Proposed Off-Site Well Locations
- Figure 2 Generalized Design of Proposed Monitoring Wells

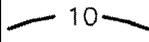
**FIGURES**

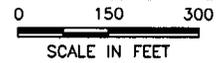


**NOTES:**

1. AERIAL PHOTOGRAPH SOURCE GOOGLE EARTH, 2009.
2. PCE ISOCONCENTRATION CONTOURS WERE DRAWN USING WINTRAN 1.0 CONTAMINENT PLUME MODELING SOFTWARE.
3. PROPOSED OFF-SITE LOCATIONS SUBJECT TO FIELD VERIFICATION.

**EXPLANATION**

- MW-1  EXISTING GROUNDWATER MONITORING WELL
-  PROPOSED OFF-SITE WELL LOCATION
-  SITE PROPERTY BOUNDARY
-  PCE ISOCONCENTRATION CONTOUR IN MICROGRAMS PER LITER. DASHED WHERE INFERRED

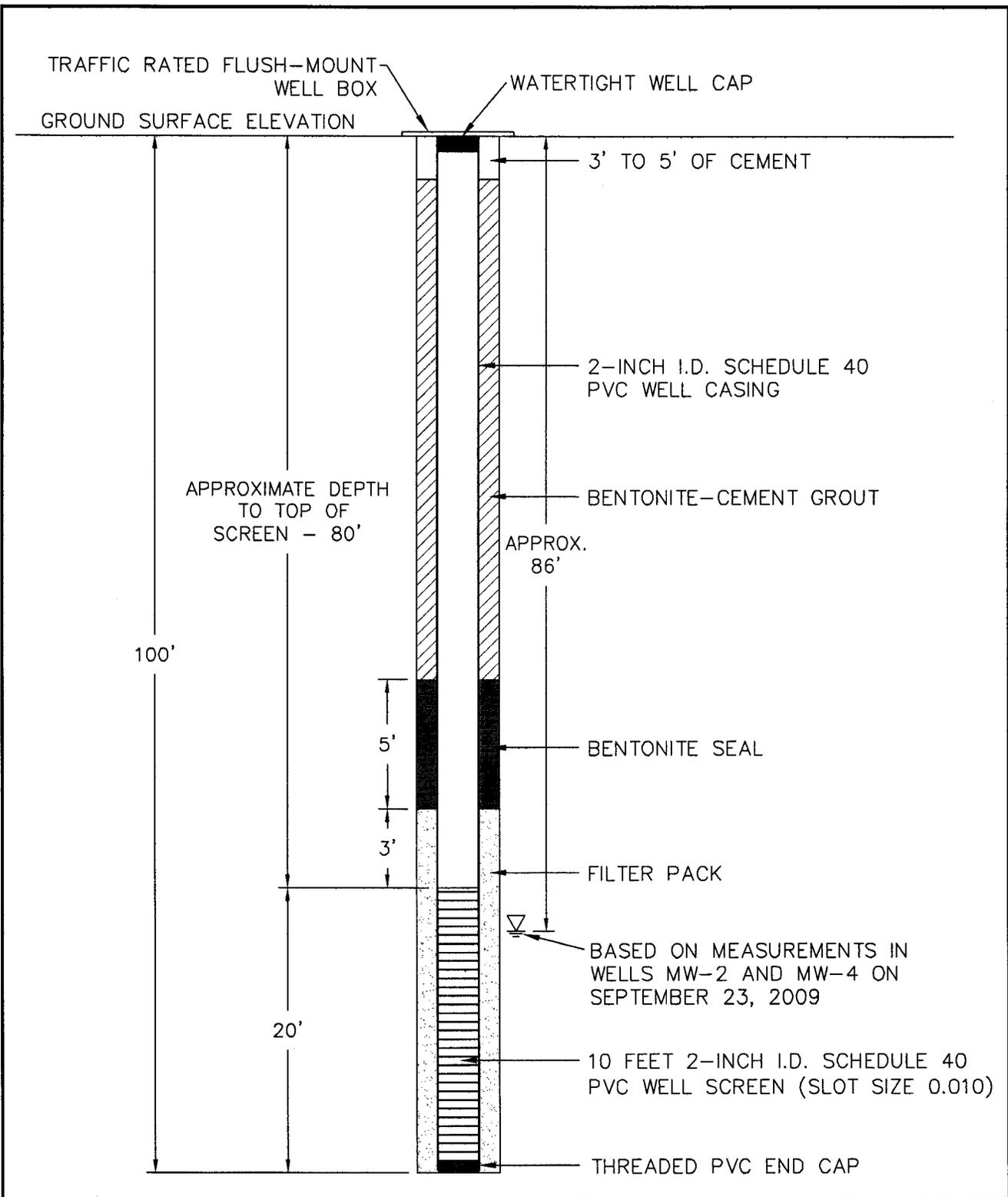


**MISSION** **MISSION GEOSCIENCE, INC.**  
 ENVIRONMENTAL & GEOTECHNICAL CONSULTANTS

**MAP SHOWING PROJECTED PCE CONCENTRATIONS AND PROPOSED OFF-SITE WELL LOCATIONS**  
 3000 WEST LOMITA BOULEVARD  
 TORRANCE, CALIFORNIA

**FIGURE 1**

03-451-A0176.DWG  
11/3/2009 10:37AM



**PROPOSED WELL  
CONSTRUCTION DETAILS**

NOTE:

1. FIGURE IS DRAWN NOT-TO-SCALE.



**MISSION GEOSCIENCE, INC.**  
ENVIRONMENTAL & GEOTECHNICAL CONSULTANTS

**GENERALIZED DESIGN OF PROPOSED  
MONITORING WELL**  
3000 WEST LOMITA BOULEVARD  
TORRANCE, CALIFORNIA

**FIGURE 2**

03-451-A0175.DWG  
11/30/2009 2:41 PM

**License Agreement to Install Four Groundwater Monitoring Wells within Public  
Right-of-Way  
3000 West Lomita Boulevard, Torrance, California  
MISSION File Number: 03-451**

**ATTACHMENT D**

**DTSC Approval Letter dated December 21, 2009**



Linda S. Adams  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Maziar Movassaghi  
Acting Director  
5796 Corporate Avenue  
Cypress, California 90630



Arnold Schwarzenegger  
Governor

December 21, 2009

Mr. Ronald Morosky  
Site Manager  
Alcoa Corporate Center  
201 Isabella Street  
Pittsburgh, Pennsylvania 15212-5858

### **OFF-SITE WELL INSTALLATION WORKPLAN APPROVAL - ALCOA FASTENING SYSTEMS, 3000 WEST LOMITA BOULEVARD, TORRANCE, CALIFORNIA 90505**

Dear Mr. Morosky:

We received the Off-Site Well Installation Workplan (Workplan) dated December 3, 2009 prepared by Mission Geoscience, Inc. The Workplan presents the procedure for installing four off-site groundwater monitoring wells in order to investigate the extent of down gradient and cross-gradient groundwater contamination. We have reviewed the Workplan and approve of its implementation.

Please submit a report documenting the installation of the groundwater monitoring wells by March 15, 2010.

Please call me at (714) 484-5324 if you have any questions.

Sincerely,

Jermaine Nora  
Hazardous Substances Engineer

cc: see next page

Ronald Morosky  
December 21, 2009  
Page 2

cc: Mr. John Kulak  
CUPA Coordinator  
Torrance Fire Department  
3031 Torrance Boulevard  
Torrance, California 90530

Mr Suman Ghosh, Ph.D.  
Project Hydrogeologist  
Mission Geoscience, Inc.  
Environmental & Geotechnical Consultants  
2082 Michelson Drive, Suite 400  
Irvine, California 92612

Mr. Ted Johnson  
Water Replenishment District of Southern California  
4040 Paramount Boulevard  
Lakewood, California 90712

Mr. Charles Schaich  
Department of Public Works  
City Torrance  
20500 Madrona Avenue  
Torrance, California 90503