

# TOURTELOT CLEANUP PROJECT



## FIVE-YEAR INSPECTION AND WRAP-UP REPORT

Benicia, California

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## Background & Overview

The purpose of the Five-Year Inspection and Wrap-Up Report is to further ensure the continual safety of the Tourtelot Project Site. The Tourtelot Project Site consists of approximately 220 acres located in the northwest corner of the former Benicia Arsenal, north of Rose Drive and west of East 2nd Street. From 1944-1960 the Tourtelot property was leased to the U.S. Army as part of the Benicia Arsenal. In 1989 the City zoned the property for residential use. In 1996, the property owner discovered that the site contained ordnance and explosives (OE) that the Army had left on the property. The discovery of ordnance was reported to the City of Benicia, the United States Army Corps of Engineers (USACE) and the California Department of Toxic Substances Control (DTSC). The property was secured and the property owner began working on further investigation and cleanup.

Remediation of the Project Site to remove OE was undertaken, with oversight by DTSC and USACE. The Tourtelot Cleanup Project was completed in June 2004, and the DTSC issued a No Further Action determination confirming that no further removal actions are required. All residential areas were approved for unrestricted residential use. Open space portions of the Project Site, all of which are owned by the City of Benicia, are subject to ongoing inspection and reporting requirements that are designed to monitor the Project Site. The wrap-up report helps the City of Benicia to find and understand any reoccurring problems or concerns.

The wrap-up report must be carried out by a City of Benicia representative and is due every five years beginning in 2009. It should be submitted no later than May 30 of that year.

City personnel or contractors who are responsible for conducting the wrap-up report and monitoring activities should review the past five Annual Inspection and Report Forms, the Tourtelot Restricted Areas Educational Manual and refer, as necessary to the Land Use Covenant, Contingency Action Plan (CAP) and Operations and Maintenance Plan (O&M Plan) referred to in the Educational Manual and in the Report Form.

A primary purpose of the City's Five-Year Report is to assist DTSC in assessing performance of the institutional controls that are imposed under the Land Use Covenant, CAP and O&M Plan and in evaluating whether they are successfully preventing exposure to any OE items that could potentially remain on the Project Site. The Five-Year Report also is intended to provide information to DTSC that will assist it in determining whether any changes in the institutional control measures or the procedures used to monitor them should be made to enhance their performance or to better protect human health and the environment. In preparing the Five-Year Report, please keep these purposes in mind and provide information that will assist DTSC in making such determinations.

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## FIVE-YEAR INSPECTION AND WRAP-UP REPORT INSTRUCTIONS

1. Please use the included CD ROM to print out the Five-Year Inspection and Wrap-Up Report.
2. Fill out, sign and date each section of the Five-Year Inspection and Wrap-Up Report. The signature of the person filling out the section is required.
3. A City of Benicia Representative must compile all sections of the Five-Year Inspection and Wrap-Up Report and sign and date page 1 and 12. Please include the contact information requested on page 12.
4. Mail one completed form to each of the following addresses no later than May 30th:

**Rizgar Ghazi**

Project Manager for Tourtelot Cleanup Project  
California Department of Toxic Substances Control  
8800 Cal Center Drive  
Sacramento, CA 94826-3200

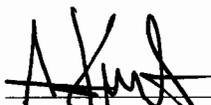
**Heather McLaughlin**

City Attorney  
Benicia Project Manager, Tourtelot Cleanup Project  
City of Benicia  
250 East L Street  
Benicia, CA 94510

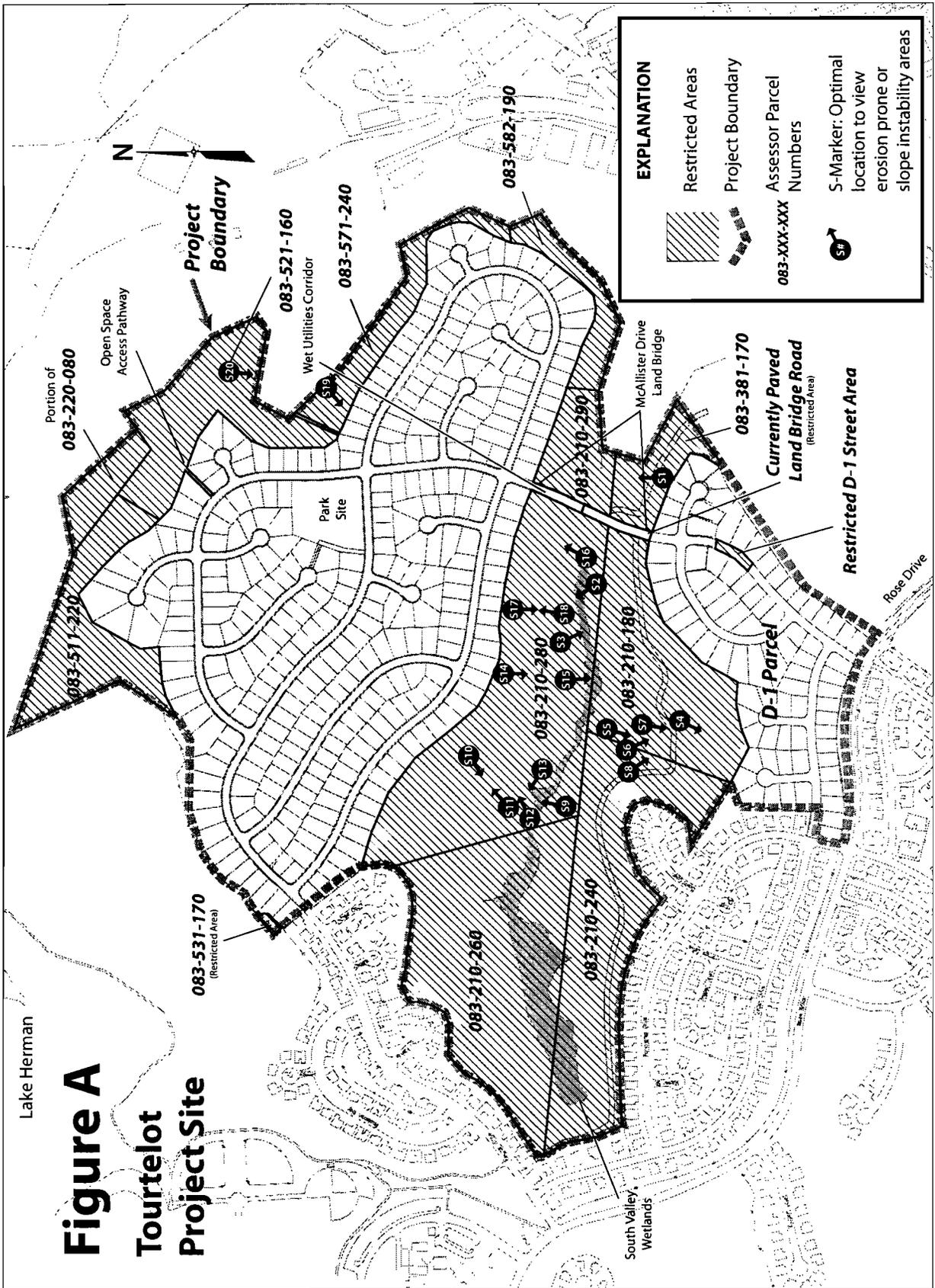
**Bill McNair**

President  
Pacific Bay Homes, LLC  
4041 Macarthur Boulevard, Suite 500  
Newport Beach, CA 92660

4-21-2009  
Report Date:

  
Compiled By (Signature)

ANDREW KENNEDY  
Print Name



EXPLANATION	
	Restricted Areas
	Project Boundary
083-XXX-XXX	Assessor Parcel Numbers
	S-Marker: Optimal location to view erosion prone or slope instability areas

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## EROSIONS AND LANDSLIDES

### A. Summarize the findings for the past five years regarding erosions and landslides as documented in the Annual Inspection and Report Forms.

Over the past five years, site inspections have determined the Historical Landslide Areas to be stable. A small slump first noticed in 2007 above S18 (see Figure A) has not not changed in the last two years. It is important to note that the marker at S5 has been undercut by the upstream outfall and no longer exists. This has been closely monitored and no further action is necessary at this time.

### B. Are the inspections of potential erosions and landslides achieving the intended purpose of identifying areas where erosion or a landslide could expose OE so that repairs or other action may be undertaken to prevent an event that uncovers a OE?

Yes

No

*If no, please explain and provide any recommended changes to better achieve the intended purpose:*

### C. Figure A shows the location of "S-marker" stations that were determined to be the optimal locations from which to view each erosion-prone or slope instability area. Each such station was marked in the field in June, 2004, to that the location could be found in annual monitoring events. The markers consist of 3/4 inch galvanized pipe set in concrete with an identification number. When installed, the galvanized pipe was brightly colored so it could be readily located during monitoring events. Please provide answers to the following questions:

1. Are the field markers still present?

Yes

No

2. Can they be readily located in the field?

Yes All of the pipes set in concrete were repainted this year with high-visibility yellow paint.

No

3. Are the markers still in their original locations, as shown on Figure A?

Yes

No Station marker S5 is no longer in it's original location. The marker has been relocated onto the rock embankment.

4. Are the identification numbers still legible?

Yes

No

*Erosions and Landslides form continued on next page.*

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## EROSIONS AND LANDSLIDES (CONTINUED)

If any of your answers are no, please describe what steps the City will take to repair or replace the markers. Also, please provide any recommendations the City may have to improve the field marking of the stations for future monitoring events.

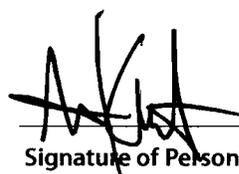
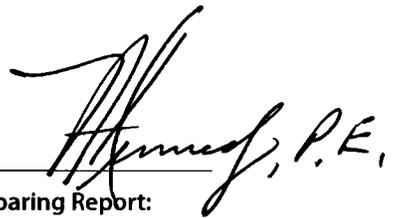
We are not recommending that the City try to repair the S5 Station Marker. The Rock embankment where the stake has been set in stone, provides an effective vantage point for the necessary photos. The rock has also been tagged with the number 5.

D. If this erosion and landslide evaluation was performed by a consultant retained by the City, please provide a copy of any written reports provided by the consultant to the City.

No reports, other than the Annual Inspection Report, have been generated by the consultant.

4-21-2009

Report Date:

  
Signature of Person Preparing Report: 

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## UNAUTHORIZED ENCROACHMENT IN OPEN SPACE

A. Summarize the findings for the past five years regarding unauthorized encroachment in open space as documented in the Annual Inspection and Report Forms.

Over the past five years, the number of encroachments into the Open Space has remained relatively low. Most of the encroachments are small sitting areas built in the Open Space abutting the property line. This year however, we found our first permanent structure built encroaching in the Open Space. A concrete curb has been built running parallel to the property line abutting the Open Space at 699 Andrew Ct. (See photos in Appendix B of the Annual Inspection Report). In addition to this encroachment we found two other new encroachments on Arguello Dr. Arguello Dr. was the last phase of construction completed that abuts the Open Space, so these encroachments are from residents who have not lived there long and may not be aware of the City's prohibition of encroachments in the Open Space.

B. Are the inspections on unauthorized encroachment in open space achieving the intended purpose of preventing unauthorized Excavation Activities in Restricted Areas?

Yes

No

*If no, please explain and provide any recommended changes to better achieve the intended purpose:*

4-21-2009

Report Date:

 P.E.

Signature of Person Preparing Report:

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## COVENANT COMPLIANCE

A. Summarize the findings for the past five years regarding compliance with the Land Use Covenant as documented in the City's Annual Inspection and Report Forms.

All of the findings in the Annual Inspection Reports indicate that there has been complete compliance with the Land Use Covenant.

B. The Land Use Covenant is intended to prevent uses of the open space within the Tourtelot Project Site that are more intrusive in nature (e.g., construction of buildings) or which would attract significantly greater numbers of people than the passive recreational uses the public typically undertakes in undeveloped open space. Are the prohibitions in the Covenant achieving this purpose?

Yes

No

*If no, please explain and provide any recommended changes to better achieve the intended purpose:*

C. Should the restrictions of the Land Use Covenant be modified?

Yes

No

*If yes, what modifications do you recommend? Please explain the rationale for the modifications that are proposed.*

4-21-2009  
Report Date:

  
Signature of Person Preparing Report:  P.E.

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## EXCAVATION ACTIVITIES

A. Summarize the findings for the past five years regarding Excavation Activities in Restricted Areas as documented in the Annual Inspection and Report Forms.

Over the past five years the only findings of any type were associated with child's play. This would be limited to small fox holes, a meandering bike path and some bmx jumps that were found in 2006. All of these activities are no longer taking place within the restricted areas. No other activities that would fall under the requirements of Section 1.2 of the CAP have been observed during the Annual Inspection Reports.

B. Are the annual reports on Excavation Activities in Restricted Areas achieving their intended purpose of verifying that City personnel and City contractors are complying with the required safety precautions outlined in the CAP?

Yes

No

*If no, please explain:*

*Also, please provide recommendations for measures that the City could implement to better achieve the intended purposes.*

4-21-2009

Report Date:

  
Signature of Person Preparing Report:

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## LAND BRIDGE MESH BARRIER

A. Summarize the findings for the past five years regarding inspection of the Land Bridge Mesh Barriers as documented in the Annual Inspection and Report Forms.

Over the last five years we have been monitoring and reporting on the condition of the Mesh Barriers along the seams. It is along these seams that the hold down pins have lifted allowing the edges of the layers to lift from the slope. We have been monitoring the seams very closely and providing annual photographs of their condition. As of this year we continue to believe that the vegetation is providing additional hold support and keeping the Mesh Barrier adhered to the slope. We will continue to monitor the Mesh Barrier's ability to prevent unauthorized excavation and recommend any necessary repairs if needed.

B. Is the Land Bridge Barrier achieving its intended purpose of preventing digging or other intrusive activities on the sides of the McAllister Drive Land Bridge?

Yes

No

*If no, please explain and provide any recommended changes to better achieve the intended purpose:*

C. Does the Land Bridge Mesh Barrier show signs of deterioration or damage that could impair its integrity?

Yes

No

*If yes, please describe the measures that the City proposes to implement to restore the integrity of the Land Bridge Mesh Barrier.*

As mentioned above, the Mesh Barrier does have some minor damage. The integrity of the barrier has been compromised in some locations. These areas are minimal in size and deterioration. The area with the most damage has been photographed and included in Appendix C of the Annual Inspection Report.

D. Based on the current condition of the Land Bridge Mesh Barrier, do you anticipate that it will require repairs or replacement in the next five years to maintain its integrity?

Yes

No

*If yes, please describe the City's proposed plans for undertaking such repair or replacement.*

4-21-2009

Report Date:

  
Signature of Person Preparing Report:

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## EDUCATION

A. Summarize the findings for the past five years regarding public education and awareness as documented in the Annual Inspection and Report Forms.

B. Are the educational and public awareness activities described in Section 3.7 of the O&M Plan achieving their intended purpose of keeping Benicia residents informed of the potential for encountering OE items from the former Benicia Arsenal and instructing them on safety measures to be taken if OE is encountered?

- Yes  
 No

*If no, please explain and provide any recommended changes to better achieve the intended purpose:*

*School education needs to be done more frequently*

C. Are the training requirements described in Section 3.7 of the O&M Plan for personnel in the Public Works Department achieving their intended purpose of maintaining a knowledge base within the Department of the special safety precautions that must be observed if City personnel or City contractors undertake Excavation Activities in Restricted Areas?

- Yes  
 No

*If no, please explain and provide any recommended changes to better achieve the intended purpose:*

D. Are the training requirements described in Section 3.7 of the O&M Plan for personnel in the Community Development Department achieving their intended purpose of maintaining a knowledge base within the Department of the restrictions imposed by the Land Use Covenant on changes on allowing land use changes or issuing special use permits or encroachments permits for Restricted Areas?

- Yes  
 No

*If no, please explain and provide any recommended changes to better achieve the intended purpose:*

*Education form continued on next page.*

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## EDUCATION (CONTINUED)

E. Are the training requirements described in Section 3.7 of the O&M Plan for the Fire Department and Police Department achieving their intended purpose of maintaining a knowledge base of the process that should be followed if the Departments receive reports of OE found in Benicia?

Yes

No

*If no, please explain and provide any recommended changes to better achieve the intended purpose:*

F. Should the program developed by the US Army Corps of Engineers for Benicia's elementary schools continue?

Yes

No

*If no, please explain: not being done currently.*

G. Should the Camel Barn Museum continue the educational display regarding the potential for encountering OE from the former Benicia Arsenal?

Yes

No

*If no, please explain and provide recommendations for an alternate location for the display and/or an alternate program to maintain community awareness of the potential for encountering OE from the former Benicia Arsenal:*

H. Should the annual training requirements for personnel in the Benicia Public Works Department, Community Development Department, Fire Department and Police Department continue?

Yes

No

*If no, please explain:*

Should the training programs continue at all? *for staff of city*

Dec 18, 2005  
Report Date:

  
Signature of Person Preparing Report:

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## FIRE AND POLICE DEPARTMENTS

A. Summarize the findings for the past five years regarding reports to the Fire and Police Departments regarding OE items or OE scrap found in Benicia, as documented in the Annual Inspection and Report Forms.

*No ordinance has been reported.*

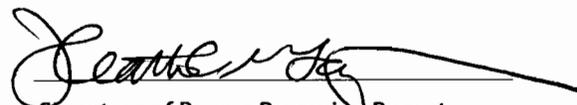
B. Are the reporting requirement regarding reports to the Fire and Police Departments of OE finds achieving their intended purpose of keeping the DTSC apprised of any OE finds that may have come from the former Benicia Arsenal?

Yes

No

*If no, please explain and provide any recommended changes to better achieve the intended purpose:*

12-18-09  
Report Date:

  
Signature of Person Preparing Report:

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## WETLANDS

A. Summarize the findings for the past five years regarding inspections of the Protective Wetland Signs as documented in the Annual Inspection and Report Forms.

The Wetlands Area is well marked by the Protective Wetlands Signs. All of the signs are intact and have no damage or deterioration. Photos of the Wetlands Signs are in Appendix A of this Five Year Wrap Report.

B. Are the Protective Wetland Signs achieving the intended purpose of discouraging the public from entering the wetlands?

Yes

No

*If no, please explain and provide any recommended changes to better achieve the intended purpose:*

C. Do the Protective Wetlands Signs show signs of damage or deterioration that could cause the signs to fall or become illegible?

Yes

No

*If yes, please describe the measures that the City proposes to implement to repair or replace the signs.*

D. Based on the current condition of the Protective Wetlands Signs, do you anticipate that any signs will require repairs or replacement in the next five years?

Yes

No

*If yes, please describe the City's proposed plans for undertaking such repair or replacement.*

*Wetlands form continued on next page.*

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## WETLANDS (CONTINUED)

E. Beginning with the City's second Five-Year Inspection and Wrap-Up Report (due May 30, 2014), please also respond to the following questions regarding the viability of the thorny plants installed around the Wetlands Restricted Area:

1. Summarize the findings for the past five years regarding the continued viability of the thorny plants and measures taken to improve their viability, as documented in the Annual Inspection and Report Forms.

2. Are the thorny plants achieving the intended purpose of discouraging the public from entering the wetlands?

Yes

No

*If no, please explain and provide any recommended changes to better achieve the intended purpose.*

4-21-2009

Report Date:



Signature of Person Preparing Report:



# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## GLOSSARY OF TERMS

**CAP** – Contingency Action Plan

**Covenant** – Land Use Covenant

**DTSC**—California Department of  
Toxic Substances Control

**O&M Plan** – Operations and Maintenance Plan

**US Alert** – Underground Service Alert

**USACE** – U.S. Army Corps of Engineers

## OE DEFINITIONS

“OE” means ordnance and explosives and may include OE-Energetic, OE-Like or OE Scrap items.

“OE-Energetic” is defined as ammunition or ammunition components that contain measurable amounts of explosives that have been abandoned, expelled from demolition pits, burned, buried, lost or discarded; or soil containing 10 percent or more of explosives.

“OE-Like” refers to any item that is (1) any recognizable, intact component of an OE item that presents no explosive hazard or (2) an ordnance item, other than small arms cartridges, casings, or bullets that has retained the shape of a projectile. Examples of OE-Like items are expended fuzes, burster tubes, booster caps, rocket motors, tail fin assemblies, practice warheads or projectiles, or solid ball projectiles (such as a 37 mm armor piercing projectile).

“OE Scrap” includes those items that are fragments of intentionally destroyed items that do not contain explosives or explosive residue. OE Scrap is inert and does not pose a safety risk.

**If you have any questions regarding the information contained in the Five-Year Inspection and Wrap-Up Report, please contact:**

**Heather McLaughlin**

City Attorney  
Benicia Project Manager, Tourtelot Cleanup Project  
(707) 746-4216

**Collette Meunier**

Community Development Director  
(707) 746-4280

**Dan Schiada**

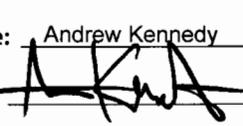
Public Works Director  
(707) 746-4332

# Tourtelot Property: Five-Year Inspection and Wrap-Up Report

## INSPECTION AND REPORT VERIFICATION

*To be signed and dated by the City of Benicia Representative responsible for compiling the Five-Year Inspection and Wrap-Up Report:*

Print Name: Andrew Kennedy

Signature: 

Date: 4-21-2009

 P.E.

### Contact Information:

Title: Engineering Technician, Kennedy and Associates

Address: 2586 Comistas Dr., Walnut Creek, CA, 94598

Telephone: 925-932-7857

Fax: 925-465-4841

Email: [ajk@kennedyandassociates.org](mailto:ajk@kennedyandassociates.org)

## INSPECTION AND REPORT RESULTS

*Please send one copy of the completed form to each of the following:*

### Rizgar Ghazi

Project Manager for Tourtelot Cleanup Project  
California Department of Toxic Substances Control  
8800 Cal Center Drive  
Sacramento, CA 94826-3200

### Heather McLaughlin

City Attorney  
Benicia Project Manager, Tourtelot Cleanup Project  
City of Benicia  
250 East L Street  
Benicia, CA 94510

### Bill McNair

President  
Pacific Bay Homes, LLC  
4041 Macarthur Boulevard, Suite 500  
Newport Beach, CA 92660

**Appendix A – Miscellaneous Tourtelot Photos  
Tourtelot Five-Year Inspection Wrap-Up Report  
April 2009**

**Wetlands Protective Signage**



**Appendix A – Miscellaneous Tourtelot Photos**  
**Tourtelot Five-Year Inspection Wrap-Up Report**  
**April 2009**

**Station S12 – Station marker is now within a wetlands area.**



**Appendix A – Miscellaneous Tourtelot Photos  
Tourtelot Five-Year Inspection Wrap-Up Report  
April 2009**

**Slump in Area H- Unchanged from the 2007 and 2008 Inspection**

