

CERTIFICATION OF CLOSURE

Industrial Wastewater Treatment Plant 360

Alameda Point, Alameda, California

Prepared for:

**Base Realignment and Closure
Program Management Office West**
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Prepared under:

Naval Facilities Engineering Command
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Letter of Transmittal

Subject: Certification of Closure for IWTP 360

Contract No. N68711-02-D-8213 CTO018

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Comments:

The attached Certification of Closure for IWTP 360 is provided for your files and has also been provided to the agencies for their administrative record.

CC: (1 copy) Doug Delong (CSO) 410 Palm Ave, B-1, Ste 161 (Treasure Island), San Francisco, CA 94130 (415-743-4713)
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Innovative Technical Solutions, Inc. (ITSI), 2007. "Revised Amendment to Closure Summary Report for Industrial Waste Treatment Plant 360, Alameda Point, Alameda, California". January.

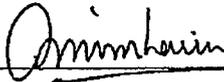
Note: The revised Amendment to Closure Summary Report dated January 2007 is used as Enclosure 1 of this certification of closure.

CERTIFICATION OF CLOSURE STATEMENT

**Certification of Closure Statement
Facility Closure Report
Industrial Waste Treatment Plant 360
Alameda Point, Alameda, California
Hazardous Waste Facility Permit CA 2170023236**

The two signatures below certify, under penalty of law, that this document was prepared under the undersigned persons' supervision, in accordance with Title 22 California Code of Regulations (CCR) §66264.115, and schedule extensions approved by California Environmental Protection Agency Department of Toxic Substances Control. Based on the combined knowledge of the activities performed during the closure of the Industrial Waste Treatment Plant (IWTP) 360, the undersigned persons are satisfied that the closure of the IWTP 360 has been performed in accordance with the approved amendment to the closure plan and Title 22 Sections §66264.110 through §66264.114.

"I certify under penalty of law that this document and all enclosures were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



Sunil Kishnani P.E.
Professional Civil Engineer
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Laura S. Duchnak
Director
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San Diego, California

1.0 INTRODUCTION

This certification of closure provides details and supporting information regarding the closure of Resource Conservation and Recovery Act (RCRA)-permitted industrial waste treatment plant (IWTP) 360 at the former Alameda Naval Air Station (Alameda Point) in Alameda, CA.

The following references were used:

- California Department of Toxic Substances Control (DTSC), 2004. "Approval of the Amendment to the Industrial Waste Treatment Plant (IWTP) 360 Closure Plan (Part I and II), Alameda Naval Air Station (Alameda Point), Alameda, California, EPA ID# CA 2170023236." February.
- Ecology and Environment, Inc. (E&E), 1995. "Closure Plan Industrial Wastewater Treatment Plant Building 360; NAS Alameda, Alameda, California." November.
- E&E, 1997. "Closure Summary Report, Building 360, Industrial Waste Treatment Plant." September 25.
- Federal Facilities Agreement (FFA) for Alameda Naval Air Station, Alameda, California. 26 December 2000.
- International Technology Corporation (IT), 2001b. "Final Field Sampling Investigation Report, (Addendum to Closure Report, September 25, 1997), Resource Conservation and Recovery Act (RCRA) Permitted Facility, Building 360, IWTP." April 12.
- Innovative Technical Solutions, Inc. (ITSI), 2007. "Revised Amendment to Closure Summary Report for Industrial Waste Treatment Plant 360, Alameda Point, Alameda, California". January.
- Tetra Tech, 2001. "Certification Report for Closure Facility Closure Report, Building 360 Industrial Waste Treatment Plant, Alameda Point, Alameda, California." April 16.
- Tetra Tech, 2004a. "Amendment to the Closure Plan for Industrial Waste Treatment Plan 360 Hazardous Waste Facility Permit CA 2170023236, Naval Air Station, Alameda Point, Alameda, California (Now Known as Alameda Point)." January.
- Tetra Tech, 2004b. "Sampling and Analysis Plan for Industrial Waste Treatment Plant 360 Closure Confirmation Sampling." January.
- U.S. Department of Navy (Navy), 1988. "Closure Plan for Industrial Waste Treatment Plant Building 360." April.
- Navy, 1990. Cover letter and "Revised Closure Plan for Industrial Wastewater Treatment Plant Building 360." June.

- Navy, 1995. "Closure Plan, Industrial Wastewater Treatment Plant, Building 360, NAS Alameda, Alameda, California." Prepared By E&E for the Navy. November.

Section 2.0 presents the required elements of closure, roles of supervisory personnel responsible for closure of IWTP 360, activities conducted by the Navy to meet the requirements specified in the closure plan, and discusses the modifications and amendments to the closure plan. Section 3.0 provides a discussion regarding the closure recommendation for IWTP 360.

2.0 REQUIRED ELEMENTS FOR CLOSURE

The closure activities for IWTP 360 have been performed in accordance with the approved amendment to the closure plan and Title 22 CCR §66264.110 through §66264.114. The following table presents the sources of information that address all of these required elements in regard to the closure of IWTP 360.

Required Elements	Source of Information
1. Certification by an independent, registered professional engineer	Page 1 of this closure certification.
2. Supervisory personnel description	Section 2.1 of this closure certification.
3. Summary of closure activities	Sections 2.2, 3.0, and 4.0 of Enclosure 1
4. Field Engineer observation reports	Section 6.0 of Final Field Sampling Investigation Report (Addendum to CSR) [IT, 2001]; Section 3.0 CSR Blg 360 IWTP [Ecology and Environment, Inc. (E&E), 1997]
5. Sampling data and analyses, including:	
• Sampling locations	Figures 3 & 4 of Enclosure 1
• Soil boring logs	Section 4.4 of Enclosure 1; Section 4.5 of the CSR Blg 360 IWTP [E&E, 1997]
• Chain of custody	Appendix B of Final Field Sampling Investigation Report (Addendum to CSR) [IT, 2001]; and Appendix F of CSR Blg 360 IWTP [E&E, 1997]
• Analytical results	Section 4.0 (2004 pipelines soil & groundwater samples) of Enclosure 1; Appendix B of Final Field Sampling Investigation Report (Addendum to CSR) [IT, 2001]; and Appendix F of CSR Blg 360 IWTP [E&E, 1997]
6. Discussion of analytical results, including:	
• Summary of results	Sections 3.0 and 4.0, and Appendix A: Tables A-1 through A-3 of Enclosure 1
• Human health risk assessment (HHRA)	Executive Summary, Section 8.0 and Appendix C of Enclosure 1
• Screening-level ecological risk assessment (SLERA)	Appendix D of Enclosure 1
7. Manifests showing disposition of wastes generated during closure activities	Appendix F of Final Field Sampling Investigation Report (Addendum to CSR) [IT, 2001]; App D & E of CSR Blg 360 IWTP [E&E, 1997]
8. Modifications and amendments to the closure plan	Executive Summary and Section 2.2 of Enclosure 1
9. Photographs	Appendix E of Final Field Sampling Investigation Report (Addendum to CSR) [IT, 2001]; Appendix C of CSR Blg 360 IWTP [E&E, 1997]

2.1 Supervisory Personnel Description

The following supervisory personnel are responsible for certifying that the IWTP 360 is closed in accordance with the DTSC-approved closure plans (Navy 1988 and 1990, E&E 1995) and the DTSC-approved amendment to the closure plan (Tetra Tech 2004):

- Lou Ocampo (Navy Remedial Project Manager) and Doug DeLong (Navy Environmental Compliance Manager) – responsible for ensuring that construction activities, including waste disposal, decontamination, building demolition, and remediation activities, are conducted as reported in the closure reports.
- Sunil Kishnani (Independent Professional Civil Engineer in the State of California) – responsible for ensuring that the demolition activities and evaluation of the analytical results reported in the closure reports meet the requirements of the closure plan and amendment to the closure plan.
- Cherry Padilla (Project Manager with Standard Permitting and Corrective Action Branch of DTSC) – responsible for ensuring that all documentation is in place and for providing final approval that the activities conducted at IWTP 360 satisfy the requirements of the approved closure plan and approved amendment to the closure plan.
- Dan Shafer (Shaw [formerly IT Corporation] Project Manager) and Ronald Karpowicz (Ecology and Environment, Inc. Project Manager) – responsible for oversight of closure activities, sample collection and analysis, and preparation of waste manifests; contracted directly for waste transportation.

2.2 Summary of Closure Activities

Closure of IWTP 360 included: 1) demolition and removal of all equipment, tanks, and associated piping, 2) removal and disposal of the sumps, concrete pad, and impacted soil, 3) soil and groundwater sampling, and 4) completing a human health and ecological risk assessment for post-closure land use. The reader is referred to Enclosure 1, the Revised Amendment to the Closure Summary Report, ITSI, 2007 for additional details and information regarding each of these closure activities.

2.3 Modifications and Amendments to the Closure Plan

The closure plan and amendments to the closure plan for IWTP 360 include the following:

- In 1988, the initial closure plan for the Building 360 IWTP was generated (U.S. Department of the Navy [Navy], 1988).
- In 1990, the Navy prepared a revised closure plan (Navy, 1990) in anticipation of the Navy's intention to transfer the wastewater treatment to an alternate IWTP.
- On November 7, 1995, the Navy submitted another revised closure plan recommending decontamination and confirmation sampling activities (Ecology and Environment, Inc. [E&E], 1995).
- On January 16, 2004, the Navy submitted an Addendum Closure Plan and Sampling and Analysis Plan to DTSC in response to DTSC's request for additional soil and

groundwater sampling near the former unit as well as along the waste pipelines that connected the former unit to Building 360.

2.4 Schedule

The following presents a chronology of the closure activities and schedule of the certification of closure for IWTP 360. The Navy and DTSC have been implementing the closure activities according to the agreed upon project schedule.

- The Navy submitted an amended Draft Closure Summary Report to DTSC on March 31, 2006. DTSC sent comments in a letter dated May 26, 2006. In the letter, DTSC requested that a revised Closure Summary Report be submitted by June 30, 2006. Lou Ocampo, Navy RPM, sent an e-mail to DTSC on June 22, 2006 stating that the June 30, 2006 could not be met because the additional risk assessments needed to comply with DTSC's Human and Ecological Risk Division (HERD) review comments and because of a project scope issue with the Navy's contractor.
- The Navy sent Response to Comments (RTCs) to DTSC on September 12, 2006. The Navy received review comments on the RTCs from DTSC in a letter dated October 31, 2006.
- On January 10, 2007, the Navy submitted the report titled "Revised Amendment to Closure Summary Report for Industrial Waste Treatment Plant 360, Alameda Point, Alameda, California". This report (Enclosure 1) addressed all DTSC comments and presented the results of the updated risk assessments completed for IWTP 360.
- On March 30, 2007, DTSC requested the Professional Engineer's (PE) certification in order for DTSC to prepare their letter for completion. DTSC indicated that the January 2007 Revised Amendment to Closure Summary Report for IWTP360 was approved.
- On May 18, 2007, DTSC reviewed the Draft Certification of Closure provided by the Navy for review on May 17th and accepted the draft subject to a minor change in the title of the DTSC Project Manager.

3.0 CLOSURE RECOMMENDATION

The following sections present the results of closure evaluations that were conducted for IWTP 360 with respect to tanks and associated piping, soil, and groundwater. In addition, Section 3.5 (Closure Recommendation) summarizes those results and demonstrates that the Navy has met the closure performance standards for IWTP 360, as stated in the approved Amendment to the Closure Plan for IWTP 360 (Tetra Tech, 2004a).

3.1 Closure Performance Standards

Based on a review of the information referenced in this document, the closure at IWTP 360 was conducted in a manner that meets the objectives of the DTSC-approved amendment to the closure plan and the requirements of Title 22 CCR §66264.110 through §66264.114. The requirements of Title 22 CCR §66264.110 through §66264.114 are presented below with annotations (in italics) that document how the Navy has addressed each of the requirements.

§66264.110 – Applicability *(The Navy has determined that Sections 66264.110 through 66264.115 apply to the closure of IWTP 360.)*

§66264.111: The owner or operator shall close the facility in a manner that:

- a) minimizes the need for further maintenance

(The Navy met this requirement by removing all equipment, tanks and related piping such that no further maintenance is needed.)

- b) controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated rainfall or run-off, or waste decomposition products to the ground or surface waters or to the atmosphere

(The Navy met this requirement by removing hazardous waste constituents from the site and conducting soil and groundwater sampling and risk assessments that demonstrated acceptable risk to human health and the environment.)

- c) complies with the closure requirements in sections 66264.178 (Closure of Containment System) and 66264.197 (Closure and Post-closure Care of Tanks)

(The Navy removed all waste residues, containers, piping, and related equipment and structures. All wastes generated during closure activities were disposed of in accordance

with applicable regulations. No contaminated soils were identified in the HHRA. The closure plan and amendment to the closure plan were approved by DTSC.)

§66264.112 – Closure Plan; Amendment of Plan *(The closure plans and amendments were approved by DTSC.)*

§66264.113 – Closure; Time allowed for closure *(The Navy and DTSC have been implementing the closure activities according to the agreed upon project schedule.)*

§66264.114 – Disposal or Decontamination of Equipment, Structures, and Soil *(The Navy properly disposed of all wastes generated during closure activities.)*

§66264.115 – Certification of Closure *(The Navy will submit to DTSC, via registered mail, the closure certification with a signed certification of closure statement. The certification of closure statement will be signed by the Navy's Director of Base Realignment and Closure, PMO West, and by an independent qualified professional engineer registered in California.)*

3.2 Tanks and Associated Piping

Removal of tanks and associated piping at IWTP 360 was conducted in 1996/1997 (E&E, 1997) and in 2000 (IT, 2001b). All tanks, units, and piping were dismantled and transported for disposal or recycling. The Navy met the closure performance standards and no further action is required for the tanks and associated piping.

3.3 Soil

The Navy conducted a HHRA with validated data from soil samples and performed a risk management evaluation and determined that no further action is required.

3.4 Groundwater

The Navy conducted a HHRA with validated data from groundwater samples and performed a risk management evaluation and determined that no further action is required under RCRA; further investigation/monitoring of the groundwater risk identified in the HHRA is deferred to the ongoing CERCLA program. In accordance with the 2000 FFA, remedial actions completed under the FFA will “obviate the need for further corrective action under RCRA.”

3.5 Closure Recommendation

The closure performance standards in the approved amendment to the closure plan for IWTP 360 (Tetra Tech, 2004a) have been met. Based on the above findings, previous investigations, and deferral of any potential future groundwater remediation into the existing CERCLA program (under the terms of the 2000 FFA), closure of IWTP 360 with no post-closure requirements is recommended.

No further action is recommended for IWTP 360 with unrestricted future reuse. This closure certification, from both the Navy's Director of Base Realignment and Closure, PMO West, and an independent, California-registered professional engineer, states that IWTP 360 has been closed in accordance with the approved closure plan and amendments and requests closure of IWTP 360 with no post-closure requirements.

REFERENCES

- California Department of Toxic Substances Control (DTSC), 2004. "Approval of the Amendment to the Industrial Waste Treatment Plant (IWTP) 360 Closure Plan (Part I and II), Alameda Naval Air Station (Alameda Point), Alameda, California, EPA ID# CA 2170023236." February.
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- International Technology Corporation (IT), 2001b. "Final Field Sampling Investigation Report, (Addendum to Closure Report, September 25, 1997), Resource Conservation and Recovery Act (RCRA) Permitted Facility, Building 360, IWTP." April 12.
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- Navy, 1995. "Closure Plan, Industrial Wastewater Treatment Plant, Building 360, NAS Alameda, Alameda, California." Prepared By E&E for the Navy. November.

ENCLOSURE 1

REVISED AMENDMENT TO CLOSURE SUMMARY REPORT
INDUSTRIAL WASTE TREATMENT PLANT 360

THIS ENCLOSURE IS CONTAINED IN
ELECTRONIC FORMAT ONLY.

FOR ADDITIONAL INFORMATION, CONTACT:

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