UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

December 4, 2009

In Reply Refer To: WTR-7

Mathews Pothen
President and CEO
Guam Shipyard
P.O. Box 13010
Santa Rita, Guam 96915

Re: June 30, 2009 Clean Water Act Inspection

Dear Mr. Pothen:

Enclosed is the December 4, 2009 report for our June 30, 2009 inspection of the Guam Shipyard. Please submit a short response to the enumerated findings on pages 5 through 7 of this report, to EPA, and Guam EPA, by **January 30, 2010**.

We appreciate your helpfulness extended to me during this inspection. Jeremy Johnstone, conducted the inspection and wrote this report, has taken an assignment in another division of EPA. I am available to Guam EPA, the Navy, and to you to assist in any way. Please do not hesitate to call me at (415) 972-3504 or e-mail at arthur.greg@epa.gov.

Sincerely,

Original signed by:

Greg V. Arthur
CWA Compliance Office

Enclosure

cc: Ivan Quintana, Guam EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY - REGION IX

WATER MANAGEMENT DIVISION

NPDES COMPLIANCE EVALUATION INSPECTION REPORT

Facility:	Guam Shipyard Naval Base Guam
NPDES Permit No.:	GU0020362
US EPA Representative:	Jeremy Johnstone Senior Environmental Engineer
GSY Representatives:	Mathews Pothens, President and CEO Keith Carter, Shipyard Manager Sonne Alston, Environmental and Safety Manager
US Navy Representatives:	Maria Lewis, EPS, NAVFACMAR EVBL Blaise Koki, NAVFACMAR EVBL Danny Dungca, Utility Worker, NAVFACMAR EVBL
Guam EPA Representatives:	Manny Minas, Supervising Engineer Maricar Quezon, Engineer II Noel Cruz, Engineer II
Date of Inspection:	30 June 2009
Report Prepared by:	Jeremy Johnstone

INTRODUCTION

On June 30, 2009 Jeremy Johnstone of the U.S. EPA Region 9 conducted an NPDES compliance evaluation inspection (CEI) at the Guam Shipyard. The purpose of the NPDES inspection was to determine the Navy's compliance status with respect to its NPDES permit (No. GU0020362). The inspection consisted of interview, records review, and a facility walk-through.

Representing the US. EPA for this portion of the inspection was Jeremy Johnstone, Senior Environmental Engineer. Representing the Guam EPA was Manny Minas, Maricar Quezon, Noel Cruz. Representing the US Navy (landlord for the leased property) were Maria Lewis, Blaise Koki, and Danny Dungca of NAVFACMAR EVBL.

Representing Guam Shipyard was Mathews Pothens, President and CEO, Keith Carter, Shipyard Manager, and Sonne Alston, Environmental and Safety Manager.

This was believed to have been the first CEI at GSY.

On the day of inspection it was partly cloudy with isolated showers.

FACILITY DESCRIPTION

Guam Shipyard (GSY or the facility) is located at Apra Harbor Complex in the Territory of Guam. The facility covers approximately 100 acres and has approximately 300 employees, and is categorized under SIC 3731 - Ship Building and Repair. Normal shipyard activities such as abrasive blasting, pressure washing, application and removal of marine surface coat materials, hydrostatic testing, metal work, electrical work, mechanical work, material storage, and other related industrial activities occur during regular operations. Guam Shipyard provides ship repair services to the U.S. Navy, Military Sealift Command, the U.S. Coast Guard and foreign navies and commercial ship operators.

The facility was previously owned and operated by the U.S. Navy as Ship Repair Facility (SRF) Guam. In 1997 the Navy transferred the Shipyard to the Government of Guam. Guam Industrial Services operates the shipyard for Gov Guam. The Navy continues to own the land and is the facility's landlord.

GSY owns and operates a drydock (AFDB-8) which is 883 feet long and 180 feet wide, with a lifting capacity of 40,000 tons, on which GSY performs overhaul, repair and alteration work on a variety of small, medium to large sized vessels. According to GSY representatives, on average they work on 4-6 vessels in drydock annually. GSY also performs work on US Navy vessels berthed at Naval Base Guam, as well as on Navy and other vessels that tie up at GSY's pier, or are hoisted out of the water onto land at the facility.

Shoreside facilities at the facility include office building, enclosed work areas (structural shop, sheet metal shop, welding shop, machinery shop, marine machinery shop, electrical shop, pipe shop, shipwright woodcrafter - insulator shop, paint shop, rigging shop, fabric shop, industrial laboratory), materials storage areas, and several open areas/yards in which material and equipment is stored.

NPDES PERMIT HISTORY AND REQUIREMENTS

Drydock

The facility was previously owned and operated by the U.S. Navy as Ship Repair Facility (SRF) Guam. At that time, a different drydock (AFDM-8) was in operation. EPA had issued SRF Guam an NPDES permit (No. GU0000035) on February 12, 1991. In September and October 1997, the facility and the NPDES permit were transferred to Guam Shipyard. In 2001 GSY obtained its larger floating drydock (AFDB-8) for which EPA issued NPDES Permit No. GU0020362 on July 17, 2002. In May 2003 Guam

Shipyard requested that NPDES Permit No. GU0000035 be terminated. The current NPDES permit (No. GU0020362) expired on July 19, 2007. Guam Shipyard submitted an application for renewal of the NPDES permit to EPA on February 13, 2007.

Authorized discharges under NPDES Permit GU0020362 include the discharge of unit-in-dock wash water and stormwater from Outfall Serial Nos. 001 through 010 (during the inspection and as part of the permit re-application process, GSY indicated that it only discharges through Outfall Serial Nos. 001-004, 009, and 010). However, the fact sheet from the permit as well as footnote (b) to Part A.1 of the permit further clarify that, in addition to vessel hull wash waters, another source of wash water that is authorized for discharge is generated by rinsing the drydock deck (after sweeping) prior to drydock lowering and vessel undocking. Potential sources of pollutants that may be discharged during vessel washing, drydock rinsing and/or in storm water runoff from the dry dock include materials used or stored, and waste products generated during repair and maintenance activities. The Facility provides no treatment of its discharges, relying on the proper implementation of BMPs to meet the established water quality objectives and effluent limitations. The requirement to develop and implement BMPs is specified at Part E.3 of the permit.

In addition, the discharge of noncontact cooling water is permitted through Outfall Serial No. 011; although facility representatives indicated that use of Outfall Serial No. 011 has been discontinued and that, since the 2005 they have dedicated Outfall Serial Nos. 007 and 008 for the discharge of noncontact cooling water.

Additional discharges or discharge locations are not permitted under NPDES Permit No. GU0020362.

Shoreside Facilities

As industrial activities as defined at 40 CFR 122.26(b)(14) occur throughout the facility (i.e. by virtue of GSY's primary SIC of 3731) , it is subject to coverage under and the requirements of EPA's Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP). GSY filed for coverage shortly after commencing operations at the shipyard and was assigned MSGP ID No. GUR05A002. Renewal Notices of Intent (NOIs) were submitted to EPA on 4/12/01 and 1/18/07. With the renewal of the MSGP in September 2008, existing dischargers such as GSY were required to have submitted renewal NOIs by no later than 1/5/09. GSY submitted a renewal NOI on 1/22/09. According to EPA's NOI Processing Center, a Request for Information was mailed to GSY on 2/23/09 requesting additional information necessary for processing the NOI. GSY submitted the information on 6/22/09; however, in accordance with its policy, the EPA NOI Processing Center ceased processing GSY's NOI and "archived" it on 5/24/09, which was 90 days after the date on which they sent the RFI to GSY.

Both Permit No. GU0020362 and the MSGP each require GSY to develop and implement a Stormwater Pollution Prevention Plan (SWPPP). The facility has prepared a single SWPPP to cover all of its activities and to satisfy this requirement under both permits. A review of files during the inspection indicated that GSY's original SWPPP was dated 4/12/01. Changes made to the SWPPP were noted each December in 2002, 2003, and 2004. The file contained notations for each subsequent year (through 2008) that no changes to the SWPPP had been made.

MONITORING AND ANALYSIS

The Discharger is required to conduct effluent (unit-in-dock wash water, drydock deck rinse water and noncontact cooling water), storm water, and ambient water monitoring as specified in Part A.1 and A.2 of NPDES Permit No. GU0020362.

Monitoring is conducted by GSY's Environmental and Safety Manager. The analysis for pH and temperature is conducted on-site by facility personnel, all additional analyses required under the permit are conducted by a contract laboratory, Calscience Laboratories, Inc. (7440 Lincoln Way, Garden Grove, CA 92841).

The facility representative stated that all outfall scuppers are normally blocked by metal plates during normal operations. The plates are removed prior to drydock deck rinsing. The rinsing is done by hose and moves along first one then the other side of the deck. Discharge samples are collected as soon as flows begin to discharge from a given outfall. Samples are collected from a small boat drawn up alongside of the drydock. The outfall sample itself is collected into a plastic bucket where it has entered and mixed with the receiving water, and the sample is poured into a sample bottle supplied by the facility's contract laboratory. This "outfall" sample aliquot is then mixed with receiving water samples collected at the midpoints between the previous and next outfall locations into the "outfall" sample bottle. This procedure is repeated at each of the six outfalls that are in use. In its reports back to the facility, the lab reports a single effluent value for each analyzed parameter, apparently compositing all effluent and noncontact cooling water discharges.

Per the NPDES permit, storm water runoff from the drydock must be monitored each month in which there is a qualifying storm event. A qualifying storm event is defined in the permit as a storm resulting in rainfall that accumulates more than 0.1 inches and occurs at least 24 hours after the previous measurable rainfall event. The facility representative (the Health, Safety, and EPA Compliance Officer) stated that he has never sampled a storm water discharge from the drydock.

MAJOR FINDINGS

Drydock operations

1. Work on the vessel Micronesian Dream was occurring at the time of the inspection. No BMPs were in evidence, in particular plastic sheeting had not been deployed beneath the vessel and no spill kits were onboard the drydock. Both of these BMPs are specified in the facility SWPPP.

2. Accumulations of solids on the drydock deck were noted. See Photo 4 attached. A mandatory BMP under the permit is for the drydock to be swept several times per day and at the end of each workday.

3. Holes in the aft end of the drydock deck allow washwaters and stormwater to discharge directly to Apra Harbor. These are not authorized discharge points.

4. NPDES Permit No. GU0020362 expired on July 19, 2007. EPA's NPDES regulations provide, at 40 C.F.R. §122.6(a), that an expiring EPA-issued NPDES permit may be administratively continued pending permit reissuance only, among other things, if a complete and timely application for renewal of an expiring NPDES permit is made. Further, 40 C.F.R. §122.21(d)(2) specifies that a timely application for renewal must be made no less than 180 days prior to a permit's expiration. GSY's renewal application was due by January 18, 2007. GSY submitted its permit renewal application on February 13, 2007. GSY did not submit their permit renewal application at least 180 days before the expiration date, as required.

Drydock discharge monitoring and reporting

5. GSY's protocol for collecting outfall samples is not in conformance with the permit. By collecting samples after they have mixed with receiving waters, and by further diluting samples with receiving water samples collected from between outfall locations, GSY is not collecting samples that are representative of the discharge, as required by the permit at Standard Condition 11 and 40 CFR 122.41(i).

   On a quarterly basis GSY submits discharge monitoring reports (DMRs) summarizing monitoring results over the preceding three month period. However, GSY reports only the aggregated average of its analytical results. It does not report monthly averages nor the minimum and maximum analytical results as is required by the permit.

6. A review of the lab reports for the month's of January and February 2009 indicated that the samples shipped by GSY arrived at the lab at temperatures in excess of the 0-6 °C range permitted by the permit and 40 CFR Part 136. The samples shipped by GSY on 1/5 arrived at the lab at a temp of 10.1 °C and those shipped on 2/23 arrived at the lab at a temp of 20.9 C. It is noted that distance transit times between Guam and GSY's contract lab in Garden Grove CA are significant. The January shipment was in transit for approximately 62 hours, and the February shipment was in transit for approximately 43 hours. GSY may wish to consider contracting with a lab in Honolulu which would significantly reduce sample shipment transit times and presumably facilitate samples remaining within the required temperature range while in transit.

7. According to GSY representatives and correspondence, GSY only monitors discharges during drydock rinsing prior to vessel undocking events, and does not separately monitor stormwater runoff or unit-in-dock wash waters that are discharged through the outfalls.

8. In 2005 GSY switched the outfalls that it uses for the discharge of noncontact cooling water to Outfall Serial Nos. 007 and 008, from the outfall (Serial Nos. 011) that is authorized by the permit. GSY notified EPA and Guam EPA in writing about this switch, but never received authorization from EPA, the permitting authority.

9. In June 2004 GSY requested in writing to EPA and Guam EPA that the permit requirement for annual effluent toxicity testing be eliminated, as provided at Part E.5 of the permit. GSY ceased performing toxicity testing after a January 2005 toxicity testing event, even though its request was not granted by EPA, the permitting authority. Thus, as of the day of the inspection, GSY had failed to conduct at least three required annual toxicity tests.

10. GSY's DMRs submitted for January-March 2009 (at least) were signed by GSY's Environmental and Safety Manager. It should be verified that this position and/or individual has been properly and duly authorized to sign such reports for GSY, in accordance to the requirements at 40 CFR 122.2(b).

<u>Shoreside activities</u>

11. Several shops were visited to check for discharges of non-domestic wastewater to the sanitary sewer (which flows to the Navy's Apra Harbor WWTP). No such connections were noted, although there may be other facilities (e.g. the industrial laboratory) that discharge or have the potential to discharge non-domestic wastewater to the sanitary sewer.

12. GSY's stormwater NPDES coverage under the MSGP has lapsed due to the tardiness of both its 1/22/09 NOI and its 6/22/09 response to the EPA NOI processing center's 2/23/09 Request for Information.

13. A barge had been hoisted onto land and was being worked upon at the time of the inspection. Hosing and a pump for hull washing had been set up, but nearby outfall scuppers had not been blocked. There was evidence of a discharge from this operation to harbor waters. See Photos 7 and 8 attached. Discharges of hull washwater or any other non-stormwater discharges are not authorized under any NPDES permit issued to GSY.

14. The facility's existing SWPPP had not been revised or updated since 2004, nor had it been properly certified by a responsible company official. As part of applying for coverage under the 2008 MSGP the facility should check to see if the SWPPP needs additional updating to conform with additional new requirements.

15. Poor housekeeping practices were observed at various locations, including outside the Electrical Shop. See Photo 5 attached. At the oil storage area some drums were observed to be stored outside of containment and/or cover. See Photo 6 attached.

Guam Shipyard
30 June 2009

Photo 1 - Port side view of Guam Shipyard's Drydock AFDB-8. Outfall No. 004 is depicted at the right side juncture of the red and gray painted areas.

Photo 2 - View of Outfall No. 4 inlet on from inside drydock. Note metal plate used to prevent discharges during normal operations.

All photographs by Jeremy Johnstone, US EPA Region 9

Guam Shipyard
30 June 2009

Photo 3 – The Micronesian Dream in drydock

Photo 4 – Accumulated solids on drydock deck

All photographs by Jeremy Johnstone, US EPA Region 9

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Photo 5 – Accumulated debris on top of drain inlet located outside of electrical shop

Photo 6 – Drums stored outside of containment and cover at the oil storage area

All photographs by Jeremy Johnstone, US EPA Region 9

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Photo 7 – Barge undergoing work Shoreside. Note hosing to left and puddled water nearby.

Photo 8 – Evidence of discharge of non-stormwater to harbor from a scupper immediately adjacent to the where a barge was undergoing work onshore.

All photographs by Jeremy Johnstone, US EPA Region 9