From:	Okubo, Watson T
To:	Nancy Rumrill/R9/USEPA/US@EPA; Craig R. Glenn
Cc:	Wendy Wiltse/R9/USEPA/US@EPA; Cindy Barger; Chang, Daniel H; David Albright/R9/USEPA/US@EPA; Aly I. El-Kadi; Henrieta Dulaiova; Hudson Slay/R9/USEPA/US@EPA; Benny Hagedorn; rbabcock@hawaii.edu; Bob Whittier
Subject:	RE: Lahaina plume modelling 1993
Date:	02/25/2011 11:34 AM

Nancy,

The pharmaceuticals are: Carbamazepine and Sulfamethoxazole. Both are resistant to degradation during wastewater treatment and persists during coastal transport, especially Carbamazepine.

Watson

From: Rumrill.Nancy@epamail.epa.gov [mailto:Rumrill.Nancy@epamail.epa.gov]
Sent: Friday, February 25, 2011 9:25 AM
To: Craig R. Glenn
Cc: Wiltse.Wendy@epamail.epa.gov; Cindy Barger; Chang, Daniel H; Albright.David@epamail.epa.gov; Aly I. El-Kadi; Henrieta Dulaiova; Slay.Hudson@epamail.epa.gov; Benny Hagedorn; rbabcock@hawaii.edu; Okubo, Watson T; Bob Whittier
Subject: Fw: Lahaina plume modelling 1993

Craig,

Here's the Injection wells flows in mgd as mentioned during the meeting. We have limited gpm data (min, avg, max) too. I do not have the historical flows for each well, but this info could be available through Maui County. Let us know if we need to assist in getting additional injection flow rate data for each well from the County.

Thank you, Nancy

----- Forwarded by Nancy Rumrill/R9/USEPA/US on 02/25/2011 11:11 AM -----

From:	Wendy Wiltse/R9/USEPA/US
To:	"Craig R. Glenn" <glenn@soest.hawaii.edu>
Cc:	Cindy Barger <cindy.s.barger@usace.army.mil>, Dan Chang <daniel.chang@doh.hawaii.gov>, David Albright/R9/USEPA/US@EPA, "Aly I. El-Kadi" <elkadi@hawaii.edu>, Henrieta Dulaiova <hdulaiov@hawaii.edu>, Hudson Slay/R9/USEPA/US@EPA, Benny Hagedorn <khagedor@hawaii.edu>, Nancy Rumrill/R9/USEPA/US@EPA, rbabcock@hawaii.edu, Watson Okubo <watson.okubo@doh.hawaii.gov>, Bob Whittier <whittier@hawaii.edu>
Date:	02/24/2011 07:34 PM
Subject:	Lahaina plume modelling 1993

Thank you all for participating in the meeting this morning to discuss sampling of the wastewater seeps at Kahekili. I do appreciate your time and expertise on these matters. I am attaching a report from 1993 that contains some modeling of the injected wastewater and an estimated time of travel to ocean = 10 days. Check out the discussion on pages 33-44 and also p 69-77.

[attachment "Tetra_Tech_1993_Prelim_Assessment_Nutrient_Sources.pdf" deleted by Nancy Rumrill/R9/USEPA/US]

I also checked Chip Hunt's 2010 report to identify the key pharmaceuticals that are good indicators of sewage. They are carbamaxepine and sulfamethoxozole (anticonvulsant and antibiotic, respectively). Chip cautions that the analyses are costly so he only ran 4 samples. We should put our heads together to determine the most critical need for these analyses.

Wendy

Wendy Wiltse, Ph.D.
EPA-PICO
300 Ala Moana Blvd. Box 50003
Room 5-152
Honolulu, HI 96850
Phone: (808) 541-2752
FAX: (808) 541-2712

From: "Craig R. Glenn" <glenn@soest.hawaii.edu>
To: Nancy Rumrill/R9/USEPA/US@EPA
Cc: Cindy Barger <cindy.s.barger@usace.army.mil>, Dan Chang <daniel.chang@doh.hawaii.gov>, "Aly I. El-Kadi" <elkadi@hawaii.edu>, Henrieta Dulaiova <hdulaiov@hawaii.edu>, Hudson Slay/R9/USEPA/US@EPA, Benny Hagedorn <khagedor@hawaii.edu>, rbabcock@hawaii.edu, Watson Okubo <watson.okubo@doh.hawaii.gov>, Wendy Wiltse/R9/USEPA/US@EPA, Bob Whittier <whittier@hawaii.edu>, David Albright/R9/USEPA/US@EPA
Date: 02/23/2011 04:45 PM
Subject: Re: Lahaina Tracer Meeting

Hi Nancy,

Here is the conference bridge info for our meeting it SOEST tomorrow:

Date: Thur Feb 24, 2011
Start Time: 10:00 am
End Time: 12:00 pm
Ports: 5

Conference #:
From Campus: 78610
From Oahu: 957-8610
From the Mainland/Neighbor Islands: 1-808-957-8610

Conference Password: enter 1414 followed by "#"

Thanks for participating.

Craig

On Feb 23, 2011, at 10:11 AM, Rumrill.Nancy@epamail.epa.gov wrote:

Thanks for the message Craig. We've talked to DOH about this sampling and understand that you have experience in seep sampling techniques. I would like to hear your discussion too. I have a conference room at 12 noon PST for you to include us. Call me at 415-947-3546 (wait a few minutes after the hour to call) or provide a number for me to call.

Thank you, Nancy

From: "Craig R. Glenn" <glenn@soest.hawaii.edu>
To: Watson Okubo <watson.okubo@doh.hawaii.gov>, Dan Chang <daniel.chang@doh.hawaii.gov>, Wendy Wiltse/R9/USEPA/US@EPA, Cindy Barger <cindy.s.barger@usace.army.mil>, rbabcock@hawaii.edu, "Aly I. El-Kadi" <elkadi@hawaii.edu>, Bob Whittier <whittier@hawaii.edu>, Hudson Slay/R9/USEPA/US@EPA, Nancy Rumrill/R9/USEPA/US@EPA, Benny Hagedorn <khagedor@hawaii.edu>, Henrieta Dulaiova <hdulaiov@hawaii.edu>
Date: 02/22/2011 05:27 PM
Subject: Lahaina Tracer Meeting

Hi,
This is to remind you that we are hosting a meeting called by Watson Okubo to discuss field sampling and sample analyses in association to the proposed Lahaina Tracer Tracer Study. The meeting will be held at UH in POST 802 this Thursday 2/24 at 10AM.

Hope to see you there.

Craig

Craig R. Glenn, Professor and Associate Chair
Dept. of Geology & Geophysics, School of Ocean and Earth Science and Technology
1680 East-West Road, POST Building Room 701
University of Hawaii, Honolulu, HI 96822
email: glenn@soest.hawaii.edu, Tel: 808-956-2200, Cell: 808-394-5155