APPENDIX I

Proposed Monitoring Program

Proposed Monitoring Program

The methodology and findings of the monitoring program are described in Appendixes E.2 and G. Components of the program include influent and effluent monitoring of flow, biochemical oxygen demand, suspended solids, oil and grease, priority pollutants, pesticides and other potential pollutants.

Receiving waters are monitored nearshore, onshore and offshore. Seven permanent stations are used for sampling sediments and collecting annual benthic samples of invertebrates for observing changes in the community structure of both soft and hard bottom communities.

The organization and staffing of the city's compliance divisions are shown on Figures 1-1 through 1-4. In addition to the ongoing monitoring program, the city had sponsored a major investigation of Mamala Bay with the objective of determining the effect of all wastewater discharges on the coastal waters of southwest Oahu. Release of the final Mamala Bay Commission Report concluded that there were no significant public health or environmental impact due to the discharge of primary treated effluent through the Barbers Point Deep Ocean Outfall. The findings and recommendations of the Mamala Bay study should be carefully studied in preparation for changes in the existing monitoring program.

General recommendations based on findings of the City's Division of Environmental Quality, local experts and conclusions of the Mamala Bay Commission may include:

- More frequent monitoring of sediments
- Refinements of analytical techniques
- Implementation of a mussel-watch-type program
- Elimination of benthic biological monitoring
- More frequent monitoring of nonpoint sources

Civil Engineer VIII — EM-8
WS- 860 Ulep, Silvestre

Civil Engineer VII — EM-7
WS- 144 Nagamine, David

Secretary III — SR-16
WS- 872 Unabia, Jessie

Senior Clerk Typist — SR-10
WS- 848 Inafuku, Dale K.

Clerk Typist — SR-8
WS- 969 Rabong, Lehua N

MONITORING AND COMPLIANCE BRANCH
Chart 4-A

REGULATORY CONTROL BRANCH
Chart 4-B

WATER QUALITY LABORATORY BRANCH
Chart 4-C & 4-C1

STORM WATER QUALITY BRANCH

Design and Construction Branch Engineer — SR-29
WS- 807 Takayesu, Gerald

Civil Engineer V — SR-26
WS- 804 Wakumoto, Randall

Civil Engineer IV — SR-24
WS- 684 Yee, Gregory

Civil Engineer III — SR-22
WS- 806 Vacant
WS- 805 Chiu, Peter

Engineering Support Technician II — SR-17
WS- 772 Kitaoka, Rochelle
WS- 773 Cacho, Jr., Benjamin M.
WS- 774 Vacant
WS- 775 Anagaran, Benildo

DEPARTMENT OF ENVIRONMENTAL SERVICES

DIVISION OF ENVIRONMENTAL QUALITY
Chart 4-A

MONITORING AND COMPLIANCE BRANCH
Design & Construction Branch Engineer — SR-29
WS- 113 Tanimoto, Ross

Annual Reports
Civil Engineer IV — SR-24
WS- 980 Vacant

Air Permits Program
Civil Engineer III — SR-22
WS- 868 Ababa, Jerome

Ocean Team
Supervising Water Quality Technician — SR-21
WS- 310 Muranaka, Alvin

Water Quality Technician III — SR-17
WS- 696 Oiph, Steven

Water Quality Technician II — SR-15
WS- 393 Woitovitch, Gary
WS- 394 Fenske, Derrick W.
WS- 406 Oliveira, Ernest
WS- 614 Kishi, Colin
WS- 897 Miyahara, Jared
WS- 898 Miyahara, Henry

Engineering Support Technician II — SR-17
WS- 432 Pamela Nonaka
WS- 926 Alphons, Venansio

Metro
Civil Engineer V — SR-26
WS- 529 Piepgrass, Don
WS- 842 Jaramilla, Ferdinando

Windward
Civil Engineer V — SR-26
WS- 264 Vacant
WS- 882 Vacant

Leeward
Civil Engineer V — SR-26
WS- 408 Lum, Jared
WS- 843 Vacant

Electrical Engineer V — SR-26
WS- 951 Lung, Edmund

REGULATORY CONTROL BRANCH
Wastewater Branch Engineer SR-29
WS- 215 Baginski, James

Civil Engineer IV SR-24
WS- 844 Vacant

Engineering Support Technician III SR-19
WS- 881 Lum, Steven

Wastewater Service Investigator SR-16
WS- 673 Vacant

Civil Engineer V SR-26
WS- 867 Kawahara, Ken

Civil Engineer II SR-20
WS- 841 Marion, Kimo A

Supervising Wastewater Service Investigator SR-19
WS- 420 Iha, Milton T.

Wastewater Service Investigator SR-16
WS- 421 Derige, Alfredo Jr.
WS- 431 Eldeen, Edith
WS- 845 Vacant
WS- 846 Suzuki, Patrick
WS- 847 Fontes, Rick
WS- 869 Victorino, Jesus
WS- 870 Day, Paul
WS- 871 Hasebe, Glenn

WATER QUALITY LABORATORY BRANCH
Wastewater Laboratory Director — SR-29
WS- 232 Tenno, Kenneth

Senior Clerk Typist — SR-10
WS- 861 Kawahakui, Laurel

PROCESS CONTROL
Sanitary Chemist I — SR-18
WS- 718 David, Radigan
WS- 987 Wong, Yvonne L.
WS- 988 Empeno, Merlita

BIOLOGY LABORATORY
Sanitary Chemist IV — SR-24
WS- 966 Vazquez, Lourdes

Sanitary Chemist II — SR-20
WS- 410 Gan, Caiguang
WS- 418 Manibog, Carolyn
WS- 430 Kimura, Nathan
WS- 899 Yamamoto, Francis
WS- 991 Kottenmeier, Werner

CHEMISTRY LABORATORY
Chart 4-C1

TOXICS LABORATORY
Chart 4-C1

QA/QC
Sanitary Chemist IV — SR-24
WS- 499 Shizumura, Lyle

Sanitary Chemist II — SR-20
WS- 400 Mikami, Beatrice
WS- 911 Bareng, Barney

Electronics Technician — BC-15
WS- 385 Yara, Francis

MICROBIOLOGY LABORATORY
Sanitary Chemist IV — SR-24
WS- 120 Asato, Barney

BACTERIOLOGY PROGRAM
Sanitary Chemist III — SR-22
WS- 404 Kon, Samuel

Sanitary Chemist II — SR-20
WS- 391 Chinn, Robert
WS- 616 Remata, Sean J.

VIIROLOGY PROGRAM
Sanitary Chemist III — SR-22
WS- 907 Vacant

Sanitary Chemist II — SR-20
WS- 402 Bimbo, Mary
WS- 403 Yamato, Julie-Ann

DEPARTMENT OF ENVIRONMENTAL SERVICES

DIVISION OF ENVIRONMENTAL QUALITY
Chart 4-C1

WATER QUALITY LABORATORY BRANCH

CHEMISTRY LABORATORY
Sanitary Chemist IV — SR-24
WS- 119 Takata, Dale

NPDES MONITORING
Sanitary Chemist III — SR-22
WS- 405 Arbuthnot, Stephen

Sanitary Chemist II — SR-20
WS- 303 Kawada, Alvin
WS- 347 Kosaki, Glenn
WS- 565 Kawamoto, Gregg
WS- 859 Kam, Leilani
WS- 976 Vacant
WS- 977 Vacant

Laboratory Technician II — SR-13
WS- 230 Vacant
WS- 287 Vacant

PRETREATMENT PROGRAM
Sanitary Chemist III — SR-22
WS- 473 Edmundson, Robert

Sanitary Chemist II — SR-20
WS- 266 Matsuda, Eric M
WS- 426 Miyake, Alan

TOXICS LABORATORY
Sanitary Chemist IV — SR-24
WS- 121 Goo, Reginald

ORGANIC ANALYSES
Sanitary Chemist III — SR-22
WS- 265 Takazawa, Richard

Sanitary Chemist II — SR-20
WS- 427 Vacant
WS- 428 Vacant
WS- 429 Yuen, Kyle

INORGANIC ANALYSES
Sanitary Chemist III — SR-22
WS- 417 Salazar-Flauta, Liela

Sanitary Chemist II — SR-20
WS- 392 Vacant
WS- 398 Vacant

AIR MONITORING
Sanitary Chemist II — SR-20
WS- 965 Vacant

01/29/2004