ANNUAL REPORT

General Permit for the Discharger of Storm Water from Small Municipal Separate Storm Sewer Systems (General Permit)

(See Small MS4 Annual Report Guidance for additional guidance on completing this Annual Report Form)

Check box if this is a new name, address, etc. A. Permittee Information 1. Permittee (Agency Name): <u>University of California Santa Cruz</u> 2. Contact Person: Courtney Trask, Storm Water Programs Manager 3. Mailing Address: 1156 High Street, PP&C 4. City, State and Zip Code: Santa Cruz, CA 95064 5. Contact Phone Number: (831) 459-4520 6. WDID # 3 44MS05079 7. Have any areas been added to the MS4 due to annexation or other legal means? \bowtie NO If YES Has map been updated? Receiving Water Name Outfall Has SWMP been updated? YES NO NO YES 8. Are you subject to the Design Standards contained in Attachment 4 of the General Permit? X YES NO If yes, report on the implementation of the Design Standards in section D.5 of this Annual Report Form. **B. Reporting Period** (check one): Coverage Commencement (April 3, 2009) to June 30, 2010 (Year 1) July 1, 2010 to June 30, 2011 (Year 2) (Report is due by September 15 July 1, 2011 to June 30, 2012 (Year 3) Use July 1, 2012 to June 30, 2013 (Year 4) each year)

The University of California at Santa Cruz's Storm Water Management Program (SWMP) was prepared in response to State Water Resources Control Board Water quality Order 2003-005-DWQ for National Pollutant Discharge Elimination System (NPDES) Phase II General Permit No. CAS000004 (State General Permit). The University's SWMP is a comprehensive 5-year plan to reduce the discharge of constituents of concern to the Maximum Extent Practicable (MEP), and to identify activities or structural improvements that help improve the

July 1, 2013 to June 30, 2014 (Year 5)

quality of the storm water runoff. These activities and structural improvements are referred to as Best Management Practices (BMPs). BMPs will be updated as appropriate to increase their effectiveness. The University's SWMP was approved by the Central Coast Regional Water Quality Control Board (RWQCB) in April 2009. In December 2009 the University signed a Declaration Form to participate in the Central Coast RWQCB joint effort for developing hydromodification control criteria. Revisions were made to the SWMP to include the University's participation in the joint effort. The plan revisions were approved by the Central Coast RWQCB in March 2010. Modifications were made to the SWMP in response to requests made by UCSC in the Annual Report 2009 and approved by the RWQCB in February 2011.

The Year 3 Annual Report is organized by Minimum Control Measures and provides a discussion of status, proposed modifications, if any, and proposed year 3 activities for each measurable goal. For each BMP, the report provides an assessment of appropriateness and effectiveness, based on the effectiveness measurement specified in the SWMP for that BMP.

Requests for Modifications of the SWMP

UCSC is proposing the following modifications of the SWMP:

- 1) *BMP 48, task 48.5*: The Joint Hydromodification Effort methodology has slightly altered and it is our understanding that the University will no longer be required to develop University-specific criteria. Therefore, UCSC is requesting a modification of BMP 48, Task 48.5. UCSC proposes alter the language to read: Campus Standards and/or specifications are modified after State Board approval of Joint Hydromodification Effort requirements.
- 2) *BMP 48, task 48.6*: The Joint Hydromodification Effort methodology has slightly altered and it is our understanding that the University will no longer be required to develop University-specific criteria. Therefore, UCSC is requesting a modification of BMP 48, Task 48.6. UCSC proposes alter the language to read: All applicable capital projects proposed for design funding after State Board approval of Joint Hydromodification criteria will incorporate modified Campus Standards and specifications by end of joint effort quarter 9
- 3) *BMP 55, task 55.5*: The Joint Hydromodification Effort methodology has slightly altered and it is our understanding that the University will no longer be required to develop University-specific criteria. Therefore, UCSC is requesting a modification of BMP 55, Task 55.5. UCSC proposes to delete this task.
- 4) *BMP 55, task 55.6*: The Joint Hydromodification Effort methodology has slightly altered and it is our understanding that the University will no longer be required to develop applicability thresholds. Therefore, UCSC is requesting a modification of BMP 55, Task 55.6. UCSC proposes to delete this task.

Certification

"I certify under penalty of law that this document and all attachments 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."

Signature of Permittee (legally responsible person)

Date Signed

JOHN BARNES, ASSOC. VICE CHANCELLOR P. P.C. /CAMPUS ARCHITECT

Name (printed)

Title

D. Minimum Control Measures

1. Public Education and Outreach

- 1 Electronic Brochures and Flyers: General Storm Water Awareness and Targeted Topics
- **a. General Summary:** To increase awareness of storm water issues and promote pollution prevention, UCSC will develop and distribute electronic brochures. Brochure topics will include: general storm water information and awareness; storm water management at construction sites; storm water management for contractors, outside service providers and lessees; storm water management for Food Service Facilities; and storm water management for Custodial Services.

b. Status of Measurable Goals

1.2: By the end of Year 1 the 4 specified brochures are available on web page. (The general information brochure was posted in the Fall of 2006. A second general information brochure on erosion from informal paths was added in 2007.)

By the end of Year 2 the fifth specified brochure is available on the web page.

At least one time per year each of the 5 required brochures is emailed to targeted audiences.

By the end of Permit Year 2, the custodial services brochure will be distributed to 100% of current employees.

At least 100 hard copies of the brochures will be distributed annually. The 100 hard copies may be a mix of any of the 5 specified brochures.

Status for Year Three

The brochure for outside services, contractors and lessees, is posted on the clean water website. The brochure for outside services, contractors and lessees was emailed to units that administer leases and will be handed out with each contract or lease. The general information and unofficial pathway brochures were emailed to College Administrative Officers during year 2 for distribution to students every year during orientation. Poster locations for custodial services and dining services were announced to employees during training/safety meetings.

Printed copies of the brochures are provided at tableing events but we do not track the exact number of brochures handed out. UCSC will continue to have printed brochures available; however, UCSC primarily relies on electronic communications to reduce the cost of printing. UCSC requested modification to BMP 1, task 1.2: Replace the measurable goal to distribute 100 hard copies of the brochure annually with the following measurable goal: Posters will be placed in employee break rooms or community spaces. Location of posters will be announced to employees during training/safety meetings. Signatures of employees attending meetings will be collected.

UCSC requested this modification in our letter to the RWQCB of April 29, 2011, but has not received a response to this request.

Supporting Documents/Location

Brochures posted on the clean water website. Emails to targeted audiences. Sign-in sheets for custodial and dining services employees. / Cleanwater.ucsc.edu and Storm Water Program files in PP&C

1.3: By end of each permit year, the 5 specified brochures have been reviewed and updated as needed. *Status for Year Three*

Storm Water Interns reviewed all existing brochures. Review determined that existing brochures did not needed revisions but two new brochures where created to educate the Campus Community on topics they found important. All brochures are posted on cleanwater website

Supporting Documents/Location

Brochures on website / cleanwater.ucsc.edu

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: Questions 4, 7, 9, 10 of the survey ask for responses that can be found in the informational brochures.
- **e.** Summary of Next Year's Activity: Review and revise brochures as necessary and disseminate them to targeted audiences.

8 Storm Water Survey

a. General Summary: Utilize surveys to determine baseline knowledge and attitudes regarding storm water within the campus community with periodic resurveys to assist in measuring and improving the effectiveness of various storm water BMPs.

Survey(s) to be developed, designed, administered and analyzed by student interns.

This BMP is intended to be one of several means of public education, outreach, participation and involvement. This BMP may be utilized to target specific audiences. This BMP may be used to address any or all storm water quality concerns.

b. Status of Measurable Goals

8.4: Survey administered and results analyzed by June 30th of Permit Years 3, 4, 5

Status for Year Three

Student interns prepared, administered and analyzed results by June 30th

Supporting Documents/Location

Survey results from KWIK Surveys.

Analysis of survey results. / PP&C Storm Water Program Files

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: We received 162 completed surveys, 194 total responses. The results of last years survey prompted the students this year to create a facebook page to incorporate social media into our public outreach. This years results did not prompt changes to the SWMP but interns did make suggestions for public awareness campaigns, creating relationships with faculty and campus colleges, and promoting the SWMP through online social networks.
- **e.** Summary of Next Year's Activity: Develop and administer a survey following the guidelines established in year 2

12 Web Page

a. General Summary: The previous UCSC storm water web page was moved to its own domain, http://cleanwater.ucsc.edu/, and substantially revamped in the summer of 2006. Since then, periodic updates have occurred. As of September 2008, the website includes pages on storm water concern reporting, the SWMP, an interactive map of storm drains on Science Hill, 2 general awareness brochures, internship and volunteer opportunities and other features. As of June 2010 all year 1 brochures have been posted on the website. The intent is for the web pages to serve as the major portal for information dissemination regarding the SWMP. The web page updates are made quarterly during the permit term.

b. Status of Measurable Goals

12.1: Web page updated at least quarterly with current SWMP activities (copies of brochures/flyers, annual reports, notices for upcoming activities, etc.).

Status for Year Three

The cleanwater website was completely redesigned by student interns this year. They also created a facebook page and included a like us on facebook link on the cleanwater website. Lots of new content and pictures.

Supporting Documents/Location

Emails with student interns and ITS. See redesigned page at cleanwater.ucsc.edu. / Storm Water Program files in PP&C.

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: There were 5,587 visits to the clean water web page in year 3.
- **e. Summary of Next Year's Activity:** On a quarterly basis, update web page with current SWMP information. Maintain and track the number of hits.

13 Mark Storm Drains

a. General Summary: Storm drain marking involves labeling storm drain inlets with plaques, tiles, painted or pre-cast messages warning citizens not to dump pollutants into the drain. In 2007, a Storm Drain Marking Team was convened. The team included representatives from Physical Plant, Colleges and University Housing Services, Transportation and Parking Services, EH&S, and PP&C-Campus Architect. The team selected markers and designated locations to be marked. Markers were installed at several locations in the summer of 2007. Markers will be installed at additional locations during the permit term.

Volunteers will be sought to identify locations where markers are missing or damaged.

b. Status of Measurable Goals

13.2: By the end of Permit Year 3, mark 100% of storm drains located on Primary and Secondary roads. *Status for Year Three*

66% of the primary and secondary road markings were complete at end of year 2. The remaining markings were completed 11-30-2011 under work order WO00353921 to the UCSC Paint Shop

Supporting Documents/Location

For PAINT Shop Stencil 8 2011.dwg

FAMIS wo00353921 / Work order Physical Plant work order desk

13.3: By the end of Year 3, mark 80% of storm drains on CUHS service roads.

By the end of Year 4, mark 100% of storm drains on CUHS service roads.

Status for Year Three

PP completed marking 100% of storm drains on CHES-funded service roads in 2011.

Supporting Documents/Location

For PAINT Shop Stencil 8_2011.dwg / Physical Plant

13.5: By the end of Permit Year 3, mark 100% of storm drains located on Primary and Secondary roads.

By the end of Year 3, mark 80% of storm drains on CUHS service roads.

By the end of Year 4, mark 100% of storm drains on CUHS service roads.

By the end of Year 3, mark 80% of storm drains in main campus parking lots.

By the end of Year 4, mark 100% of all parking lots.

Status for Year Three

Student Interns divided up Campus maps and conducted surveys of Campus roads looking for storm drains that needed marking. Any missing markers are noted to Physical Plant.

Supporting Documents/Location

Campus maps marked up by Student Interns / PP&C storm water program files

13.6: By the end of Year 3, marking team has reconvened and developed an action plan for any additional marking.

Status for Year Three

Storm drain marking team developed an action plan for additional marking. Storm drain marking team determined that high traffic plazas and loading docks on Main Campus should be the next areas to be marked.

Supporting Documents/Location

BMP 13.06 Storm Drain Marking document dated 5.30.12 / PP&C Storm Water files

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: 100% of required storm drains have been marked.
- **e. Summary of Next Year's Activity:** Implement activities developed by storm drain marking team for BMP 13.06

14 Access to SWMP

a. General Summary: Engage campus community in implementing SWMP. Make SWMP and annual reports available at EH&S Office, McHenry Library and on web page.

b. Status of Measurable Goals

14.2: Annual reports available at designated locations within 30 days of completion. At same time, verify SWMP still available at all locations.

Status for Year Three

Annual Report was made available at EH&S Office, McHenry Library and on web page within 30 days of completion. It was also confirmed that the SWMP was available at each of the above locations.

Supporting Documents/Location

Email sent to Jan Becking, Mc Henry Library, requesting annual report be attached to SWMP and confirm it is accessible to public. Email from Carolyn Lagattuta, Communications and Marketing Assistant, reporting that neither her or Jim Burns, Director of Public Information, received any complaints regarding availability of the SWMP. / Storm Water Program files, PP&C.

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: No complaints from people who could not access the SWMP were received by the Director of Public Information or the Storm Water Manager.
- **e.** Summary of Next Year's Activity: Make annual report available at designated locations within 30 days of completion. Verify that the SWMP is still available at all locations.

2. Public Involvement and Participation

25 BMP Development Team: Investigation of Non-Storm Water Discharges

a. General Summary: As described in BMP #47 (Review of Non-Storm Water Discharges), during the development of the SWMP, 17 categories of non-storm water flows were examined to determine if UCSC has these flows at the facilities covered by the SWMP and if so, whether these flows might impact storm water quality. That review identified 7 flows requiring additional investigation. During Permit Years 2 and 3, teams will investigate these 7 flows. The team will determine if the flows occur, and if so, how they should be addressed.

b. Status of Measurable Goals

25.2: By the end of permit year three, investigation and an action plan are complete for residential car washing flows.

Status for Year Three

The UCSC Storm Water Management Program development team has completed required goals for BMP 25.2. The SWMP development team investigation determined the following: there are no residential car washing water flows at MSC; the Faculty/Staff housing CC&Rs prohibit car washing on Campus; and there have been cases of residential car washing at UCSCs Family Student Housing. The SWMP development team created and distributed a brochure on UCSC residential car washing and the environmental impacts to Family Student Housing and Faculty/Staff Housing. This brochure informs and reminds UCSC residents that car washing on campus is strictly prohibited. Lastly Family Student Housing and Faculty/Staff Housing representatives participated in annual training including information on non-storm water discharge concerns.

Supporting Documents/Location

Staff/Faculty Housing CC&Rs

Car Washing Brochure

Training sign-in sheets / CC&Rs: on file with Housing

Car washing brochure: cleanwater.ucsc.edu Training sign-in sheets: PP&C stormwater files

25.3: By the end of Permit Year 3, retrofit plan will be developed if necessary

Status for Year Three

Elevator Sump was removed and line capped.

Supporting Documents/Location

Email confirmation documents from Physical Plant / PP&C stormwater files

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: Potential non-storm water flows related to car washing were determined. Brochures and training provided. Elevator sump was removed and capped. No new BMPs required.
- e. Summary of Next Year's Activity: BMP was completed in year 3, there is no scheduled activity for next year

35 Storm Water Advisory Committee

a. General Summary: CLUMAC (Campus Land Use Management Advisory Committee) will be informed of SWMP-related activities and may offer guidance and assistance in implementing the SWMP. EH&S will make semi-annual presentations to CLUMAC on the SWMP. Interested parties may bring issues to CLUMAC for recognition and guidance.

The CLUMAC advises the Senior Superintendent of Grounds Services in the management of campus lands; reviews proposals for changes in campus resource lands and protected landscapes; reviews current management practices and provides recommendations for grounds and land management; and works closely with the UCSC Natural Reserves Advisory Committee and is advised as to the status of the environmental reserve lands. The committee reviews management procedures dealing with sensitive land management issues, such as vegetation management for fire protection, storm water management, wildlife protection and control, pesticide use, grassland and forest management, off-road bicycle use, etc.

Membership includes representative(s) from staff, faculty, graduate students, and undergraduate students. Ex-officio members include: Senior Superintendent Grounds Services, Natural Reserves Director, Environmental Programs Manager and representatives from Campus Police and Campus Fire.

b. Status of Measurable Goals

35.1: At least twice a year, SWMP issues will be included in the CLUMAC agenda, when CLUMAC is active. *Status for Year Three*

CLUMAC did not meet during year 3, therefore SWMP issues were not brought to the committee *Supporting Documents/Location*

No documentation /

- c. Appropriateness (Scale 0-9 high): 0
- **d. Effectiveness**: CLUMAC was not active during the reporting year; therefore, storm water issues were not brought to the committee.
- **e. Summary of Next Year's Activity:** At least twice during the year, if the CLUMAC is active, storm water management issues will be included in the committee's agenda.

37 University Neighbors

a. General Summary: As suggested for non-traditional MS4s, UCSC has developed a public participation program primarily aimed at the employee and user population within its boundaries. In addition, UCSC regularly engages with University neighbors and the wider community. Much of that effort is led by the Office of Government Relations. To facilitate community participation in the management of campus storm water, the Office Of Government Relations will record and relay storm water issues raised at public meetings to appropriate campus departments. Additionally, the Office Of Government Relations will provide annual SWMP report information to interested parties.

b. Status of Measurable Goals

37.1: Government Relations will track storm water issues raised and annually report on the number of issues and to whom they were referred.

Government Relations will report on how many persons were sent the annual report summary and notice. *Status for Year Three*

Staff from UCSCs Government Relations office meet monthly with city administrators and with Santa Cruz Neighbors. In addition, Chancellor Blumenthal has an annual town hall type meeting with Santa Cruz Neighbors Their membership is several hundred and they represent all of the smaller neighborhood organizations in the city. We also participate in the Santa Cruz Chamber of Commerce Community Affairs Committee. The Chancellor and Government Relations staff meet regularly with the Mayor, County Supervisor and city council members. These meetings provide ample opportunity for any issues related to storm water to be raised. In the past year, there were no concerns related to storm water.

Supporting Documents/Location

Schedule of monthly meetings located in the Government Relations office Email to Santa Cruz Neighbors with summary of 2010-11 Annual Report. / Government Relations Office

- c. Appropriateness (Scale 0-9 high): 9
- d. Effectiveness: NA
- **e. Summary of Next Year's Activity:** Track storm water issues raised and annually report on the number of issues and to whom they were referred. Report on how many persons were sent the annual report summary and notice.

38 Site Stewardship Program

a. General Summary: The UCSC Site Stewardship Program is an ongoing program within the PP-Grounds department. The Site Stewardship Program organizes a team of interns and volunteers to take on ecological restoration and guardianship for sensitive natural areas within the UCSC campus. A summary of program activities will be included in the annual report.

b. Status of Measurable Goals

38.1: A minimum of 2 work days will be held each year with at least 8 participants per work day.

Status for Year Three

10 volunteer days were held with 121 volunteers

Supporting Documents/Location

2011-12 Volunteer Day Summary.xls / Grounds Server

- c. Appropriateness (Scale 0-9 high): 9
- d. Effectiveness: NA
- **e.** Summary of Next Year's Activity: Hold a minimum of two work days each year with at least 8 participants per work day.

Volunteers and Internships

a. General Summary: Involve students and possibly others in developing and implementing the SWMP with a focus on unique solutions due to their areas of interest/expertise. Recruit volunteers and student interns to assist in developing and implementing BMPs. Volunteers and interns will be sought on an asneeded basis, but at least twice per year.

b. Status of Measurable Goals

39.1: Interns perform at least 200 hours per year of service for the storm water program.

Status for Year Three

Three interns and one volunteer completed a total of 299 hours of service for the storm water program. They completed the following projects: surveyed areas of campus looking for storm drains that had not been marked under BMP #13; developed, distributed, and analyzed the results of the survey that was completed under BMP #8; redesigned the clean water web page; started a UCSC Facebook page; tabled at the Book Store Plaza and the 11th Annual Campus Earth Summit; developed new brochures; completed a senior project based on research on UCSCs new pervious pavement.

Supporting Documents/Location

Labor Entry Reports for the two interns and one volunteer / PP&C files

- c. Appropriateness (Scale 0-9 high): 9
- d. Effectiveness: NA
- **e. Summary of Next Year's Activity:** Recruit volunteers and student interns; complete at least two definable projects implementing the SWMP; interns perform at least 200 hours of service.

3. Illicit Discharge Detection and Elimination

40 Water Protection Policy

a. General Summary: UCSC will develop and adopt a water protection policy. This policy will apply to both storm water and waste water discharges. The storm water provisions of the policy will include the discharge prohibitions described in the MS4 general permit as well as procedures for enforcement of policy provisions including penalty provisions.

b. Status of Measurable Goals

40.2: A publicity mechanism such as campus wide email will be used to inform all members of the campus community of the new policy.

Status for Year Three

The Policy remains in effect and remains enforceable.

Supporting Documents/Location

The Policy was advertised last reporting year and continues to be effective. /

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: There have been no Campus Water Protection Policy violations to date.
- e. Summary of Next Year's Activity: Continue to implement the Water Protection Policy.

41 Dry Weather Outfall Screening Program

a. General Summary: After outfall maps are completed, a field screening program will be developed to monitor all outfalls for non-storm water discharges. The outfall screening program will be based upon the EPA Guidance Manual Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments by the Center for Watershed Protection(hyperlink: http://www.epa.gov/npdes/pubs/idde_manualwithappendices.pdf.) An outfall screening team in conjunction with PP-Plumbing and EH&S will investigate the source of all dry weather flows and follow-up to eliminate any discovered illicit discharges.

b. Status of Measurable Goals

41.1: Team developed and trained during Permit Year 3.

Status for Year Three

Dry weather outfall screening teams were developed and trained during year 3.

Supporting Documents/Location

Storm Water Training sign in sheets / PP&C Storm Water program files

41.3: All outfalls screened in Permit Years 3, 4 and 5. Detected non-storm water discharges are investigated.

Status for Year Three

All MBEST outalls screened for non-stormwater discharges. Dry Weather Outfall Screening binders have been developed for MBEST, LML, Delaware and Main Campus. These binders will be used by the various Campus Staff to investigate dry weather flows. The binders contain an introduction to BMP 41, purpose of program, regulatory requirements, list of team members, procedures, definitions and maps of the area showing storm drain system. The Campus currently investigates all dry weather flows as part of routine inspections by various Staff assigned to areas on Campus, MBEST, LML and Delaware. Because we have control over all areas on Campus we can easily trace any flow to the source and quickly resolve the issue.

Supporting Documents/Location

Staff maintenance and monitoring records. / MBEST Staff

41.4: All outfalls screened in Permit Years 3, 4 and 5. Detected non-storm water discharges are investigated.

Status for Year Three

All MSC and Delaware outalls screened for non-stormwater discharges. Dry Weather Outfall Screening binders have been developed for MBEST, LML, Delaware and Main Campus. These binders will be used by the various Campus Staff to investigate dry weather flows. The binders contain an introduction to BMP 41, purpose of program, regulatory requirements, list of team members, procedures, definitions and maps of the area showing storm drain system. The Campus currently investigates all dry weather flows as part of routine inspections by various Staff assigned to areas on Campus, MBEST, LML and Delaware. Because we have control over all areas on Campus we can easily trace any flow to the source and quickly resolve the issue.

Supporting Documents/Location

Grounds Maintenance records / PP-Grounds server

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: Our monitoring is done by inspecting catch basins as part of the daily maintenance schedule. Staff routinely both visually and physically inspect catch basins for debris, standing water, and flowing water. Maintenance records are kept by Grounds, LML and MBEST staff. Follow-up maintenance to issues discovered are also logged. Any dry weather flows are investigated and issues resolved.
- e. Summary of Next Year's Activity: Continue to implement Dry Weather Outfall Screening Program.

42 Management Controls to Prevent Cross Connections

a. General Summary: Prevent cross connections between the sanitary sewer and storm drain systems. UCSC utilizes a rigorous planning, design, construction management and commissioning process to ensure cross connections do not occur. This existing process ensures that proper connections are made for the sanitary sewer and storm drains. It is effective and comprehensive because UCSC either performs all plumbing connections or contracts for the plumbing work. MBEST lessees may undertake minor plumbing connections only after approval by UCSC.

b. Status of Measurable Goals

42.1: All new plumbing work is verified either through the building commissioning process or by the PP&C Construction Inspectors

Status for Year Three

All new plumbing work was verified either through the building commissioning process or by the PP&C Construction Inspectors.

Supporting Documents/Location

Inspection reports are filed for each new construction project. / Individual Project files in PP&C office

42.2: All plumbing work associated with new construction will be permitted through the City of Marina.

Status for Year Three

MBEST did not have any new construction.

Supporting Documents/Location

Email from Graham Bice / PP&C stormwater files

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: All new plumbing work is verified either through the building commissioning process or by the PP&C construction inspectors, except at MBEST, where all plumbing work associated with new construction is permitted through the City of Marina Building Department.
- e. Summary of Next Year's Activity: All new plumbing work is verified either through the building commissioning process or by the PP&C construction inspectors, except at MBEST, where all plumbing work associated with new construction is permitted through the City of Marina Building Department.

43 Management Controls to Prevent Illicit Discharges

a. General Summary: In order to prevent the occurrence of unpermitted discharges from small projects, outside contractors/service personnel and at MBEST from lessees: boilerplate language will be adopted to be included in work/service contracts and leases prohibiting improper, outside or storm drain disposal of wastes, wastewaters etc. This language will be used in affected documents beginning in Permit Year 3. This language will be supported by an electronic brochure developed under BMP #1, Electronic Brochures and Flyers: General Storm Water Awareness and Targeted Topics.

b. Status of Measurable Goals

43.2: During Permit Years 3-5, boilerplate language used.

Status for Year Three

All new and re-newed contacts and lease agreements contained the boilerplate language.

Supporting Documents/Location

Email from Lisa Akenson and Rachel Sievert / PP&C stormwater files

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge reporting system from outside vendors or contractors.
- e. Summary of Next Year's Activity: Use boilerplate storm water language in affected documents.

44 Storm Drain System Maps

a. General Summary: Storm drain system maps are intended to aid in identifying illicit discharges and targeting system maintenance and monitoring. The UCSC Main Campus, MSC, 2300 Delaware and MBEST storm drain outfall maps will be reviewed and updated to show all existing storm drain outfalls. Receiving waters shall also be identified and located.

b. Status of Measurable Goals

44.5: During Permit Year 3, storm drain map for MBEST is completed.

Status for Year Three

Storm drain maps were completed.

Supporting Documents/Location

Email from Graham Bice, with maps attached, for MBEST. / PP&C Storm Water Files

44.6: Affected departments verify that maps are complete.

Status for Year Three

Current storm drain base map is updated and reviewed on an annual basis through the Grounds Services storm drain Inspection preventive maintenance process

Supporting Documents/Location

Grounds SD PM Map MASTER.dwg / Grounds Server

44.7: Affected departments verify that maps are complete.

Status for Year Three

maps are updated regularly and provided to Grounds

Supporting Documents/Location

Updated Campus maps / PP&C Campus base map

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: This is an on-going process so maps are being updated regularly and provided to Grounds.
- **e.** Summary of Next Year's Activity: Review and update maps for main campus, 2300 Delaware, and MSC.

45 Illicit Discharge Reporting System

a. General Summary: EH&S will establish a storm water illicit discharge reporting system with the following components: a telephone number staffed during regular working hours by a trained attendant; 24-hour emergency reporting to 9-1-1; web-based reporting monitored during regular working hours by a trained attendant; written procedures for collecting reports and conducting follow-up investigations and/or corrective actions; a system for tracking all reports made and their disposition; publicizing the reporting system in outreach materials/activities. The reporting system will additionally provide for public input/complaints regarding construction site storm water.

The system will be established during Permit Year 1. In addition to directing timely and effective responses to concerns about storm water management and providing an ongoing connection to the public, the reporting system will assist in measuring the effectiveness for many of the BMPs in the SWMP and may identify areas requiring additional BMPs.

b. Status of Measurable Goals

45.2: All components of the system are in place.

100% of reports are investigated. Annual Report to include a summary and follow-up report *Status for Year Three*

All components of the system are in place. There were no reports to the illicit discharge reporting system for year 3.

Supporting Documents/Location

No emails or calls to the illicit discharge reporting system. / NA

45.3: A storm water concerns reporting notice is included in the signage at all applicable construction sites.

Status for Year Three

Campus standards detail 01.5-01, for construction project signs, includes information on how to report a storm water concern. All new applicable project signs were checked for conformity with PP&C requirements, including the illicit discharge reporting information.

Supporting Documents/Location

Standard detail for construction site sign on PP&C website. $\!\!/$

http://ppc.ucsc.edu/standards/details/01000/01.5-01/

45.4: Publicity mechanisms are employed annually.

Status for Year Three

The illicit discharge reporting system is publicized on the clean water website at http://cleanwater.ucsc.edu/ as well as at employee training sessions, in all brochures, and poster used at tabling sessions.

Supporting Documents/Location

Dedicated page on clean water website. Powerpoint presentations used in employee training, brochures, tabling poster. / Storm water program files in PP&C

45.5: Annual review is completed and documented.

Status for Year Three

There were no reports to illicit discharge system in year 3

Supporting Documents/Location

NA /

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the system
- **e.** Summary of Next Year's Activity: Operate the illicit discharge reporting system; include notice about how to report storm water concerns on all construction site signs; publicize the illicit discharge reporting system.

4. Construction Site Storm Water Control

48	Campus Standards Handbook and Construction Contracts for Storm Water	Ī
	Management	

a. General Summary: The Campus Standards Handbook, which serves many of the same purposes as municipal building codes and ordinances, incorporates significant language to ensure erosion and sediment controls, as well as construction site waste controls. Because all applicable construction is performed under contract with the University of California, provisions for appropriate sanctions and penalties are included in the standard construction contract documents provided by the UCOP (University of California Office of the President).

b. Status of Measurable Goals

48.1: Erosion Control Standards and related requirements incorporated into all applicable new construction contracts.

Status for Year Three

All new applicable construction contracts contained requirements for Erosion Control Standards and related requirements as part of Division 1 Specifications. Division 1 Specifications are required for all construction projects.

Supporting Documents/Location

Project-specific Division 1 Specifications. / PP&C Contracts Office.

48.2: All SWPPP and related documents are reviewed for completeness before the NOI is submitted.

Status for Year Three

All SWPPs and related documents were reviewed before the NOIs were submitted, as part of the construction submittal process.

Supporting Documents/Location

Project submittals, including the SWPPPs and related correspondence. / PP&C Contracts Office.

48.3: All new construction contracts contain standard provisions for penalties and breach of contract.

Status for Year Three

All construction contracts contained provisions for penalties and breach of contract provisions.

Supporting Documents/Location

All construction contracts. / PP&C Contracts Office.

48.5: Campus Standards and/or specifications are modified after final completion of University specific criteria end of joint effort quarter 8.

Status for Year Three

Joint effort has not completed quarter 8 therefore Campus Standards have not been modified

Supporting Documents/Location

NA/

48.6: All applicable capital projects proposed for design funding after completion of University-specific criteria will incorporate modified Campus Standards and specifications by end of joint effort quarter 9

Status for Year Three

Joint effort has not yet developed criteria.

Supporting Documents/Location

NA/

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge reporting system and no notices of violation were issued related to construction sites.
- e. Summary of Next Year's Activity: Erosion Control Standards and related requirements are are incorporated into all applicable new construction contracts. All SWPPP and related documents are reviewed for completeness before the NOI is submitted. All new construction contracts contain standard provisions for penalties and breach of contract.

51 Construction Site Inspection Procedures

a. General Summary: The University Representative has the authority to stop work on construction projects that are not implementing Erosion Control or SWPPP requirements. To improve the inspection and enforcement process, PP&C will develop and implement inspection procedures and checklists for storm water management. The inspection procedure will apply to all sites that disturb more than 50 cubic yards of dirt and projects over one acre The procedures and checklist will be developed during Permit Year 1 and implementation will begin no later than the beginning of Permit Year 2.

b. Status of Measurable Goals

51.2: Procedures and checklists implemented.

Status for Year Three

Projects meeting or exceeding the size specified in BMP 51.2 were inspected by appropriately trained individuals on at least the minimum frequency specified in BMP 51.2, using the inspection form developed in year one.

Supporting Documents/Location

Completed inspection forms / Project Inspection Archive File-PP&C Archives

51.3: Procedures and checklists implemented.

Status for Year Three

There were no applicable projects under PP-Work Management.

Supporting Documents/Location

Contract records / PP&C contracts files

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge system related to construction site and no formal or informal NOVs were received related to this item.
- e. Summary of Next Year's Activity: Implement inspection procedures and checklists.

52 Plan Review for Storm Water Quality Impacts

a. General Summary: UCSC follows the procedures and initial study checklist adopted by the University of California for the implementation of CEQA. During Permit Year 2, UCSC will review its procedures for preparing CEQA documents and, if necessary, revise these procedures to ensure that impacts on storm water runoff quality and quantity are considered and that BMPs and mitigations proposed for each project meet performance standards consistent with the SWMP.

b. Status of Measurable Goals

52.1: By the end of Permit Year 2, CEQA documents have been reviewed and revised if necessary.

After Permit Year 2, Storm water runoff quality and quantity are considered in all CEQA documents. *Status for Year Three*

Initial Studies for the Cogeneration Replacement Phase 1 Project and the Merrill College Capital Renewal Project consider impacts on storm water runoff quality and quantity and assess the effectiveness of proposed storm water management features.

Supporting Documents/Location

Cogeneration Replacement Phase 1 Project, Tiered Initial Study/Mitigated Negative Declaration; Merrill College Capital Renewal Project, Tiered Initial Study, Mitigated Negative Declaration.

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: All Initial Studies and EIRs are consistent with the requirements of the BMP.
- e. Summary of Next Year's Activity: UCSC will continue to follow the current procedures and initial study checklist.

54 Construction Site Storm Water BMP Training

a. General Summary: On an annual basis, PP&C will train/retrain affected staff on the construction site storm water management BMPs. Training will utilize electronic brochures and flyers and other BMP documents such as construction site inspection procedures. Training will be conducted prior to October 1 of each year.

b. Status of Measurable Goals

54.1: 100% of affected PP&C and PP-Work Management staff have participated in training before October 1 of Permit Year 1.

Not less than 70% of affected PP&C and PP-Work Management staff participate in annual retraining. *Status for Year Three*

More than 70% of affected PP&C and PP-Work management staff participated in annual retraining. *Supporting Documents/Location*

Agenda and training presentation. Sign-in sheet. / Storm Water Program files in PP&C.

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge reporting system related to construction sites.
- e. Summary of Next Year's Activity: At least 70% of affected PP&C and PP-Work Management staff participate in annual retraining.

5. NEW DEVELOPMENT DESIGN REQUIREMENTS FOR STORM WATER MANAGEMENT

55	Main Campus Planning and Design Requirements for Storm Water Management and
	Watershed Protection

a. General Summary: SWMP sections 4.2.5.1 to 4.2.5.4 describe the context and approach for planning and development at the main campus. This BMP details the implementation tasks that UCSC will take to realize the described approach.

b. Status of Measurable Goals

55.1: PP&C and PP-Work Management shall each document that applicable measures are included in all completed construction projects.

Status for Year Three

Campus Standards are reviewed for each new project and all applicable measures are included in project design.

Supporting Documents/Location

Design review comments are complied by the Project Manager. / PP&C project files.

55.3: PP&C and Work Management shall document that all capital projects creating new impervious surfaces include an evaluation of LID practices and incorporate feasible LID practices by end of joint effort quarter 9.

Status for Year Three

All Main Campus, capitol projects, that have been funded for design after joint effort quarter 4, that increase impervious surface are providing volume control to the maximum extent possible. An LID checklist for each applicable project is completed by the designer.

Supporting Documents/Location

LID checklist

Project plans / PP&C project files

55.4: Applicable RFPs state that incorporating LID practices is an important campus goal by end of joint effort quarter 4.

Status for Year Three

All applicable RFPs stated that incorporating LID practices was an important goal.

Supporting Documents/Location

Project files / PP&C project files

55.5: University-specific criteria developed by end of joint effort quarter 8. Developed criteria will be included in projects proposed for funding starting in quarter 9

Status for Year Three

The Joint Hydromodification Effort methodology has slightly altered and it is our understanding that the University will no longer be required to develop University-specific criteria. See request for modifications.

Supporting Documents/Location

NA /

55.6: Applicability thresholds developed simultaniously with development of University-specific control criteria by end of joint effort quarter 8

Status for Year Three

It is our understanding that applicability thresholds are being developed through joint effort therefore University will not develop independently. See request for modification

Supporting Documents/Location

NA/

55.8: Projects funded after campus standards are updated shall include all applicable requirements.

Status for Year Three

The internal Campus project design review process includes review by qualified staff in PP&C. During this process, the Campus civil engineer confirms that projects are designed to meet the latest standards in

place. If there is insufficient supporting documentation to demonstrate projects are meeting the current standards, the design consultant is required to provide additional supporting documentation.

Supporting Documents/Location

Project design review comments generated by PP&C engineering, located in project file, or PP&C database depending on project size and recency. Additional supporting documents such as hydrologic calculations are kept with individual project records. / PP&C project files; PP&C database

55.11: On an annual basis, PP&C will report on the number of Area Plans that were initiated or developed during the permit year.

Status for Year Three

no area plans initiated or developed during the permit year

Supporting Documents/Location

NA /

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: 100% of completed applicable projects met the goal of incorporating LID practices to the maximum extent practicable, providing volume control to the MEP, and incorporated BMP 55.7 campus standards updates
- e. Summary of Next Year's Activity: Applicable measures are included in all construction projects; applicable RFPs state tate incorporating LID practices is an important campus goal; all projects shall include applicable requirements from Campus Standards; review and evaluate 2005 LRDP and other planning documents and revise as appropriate.

56 Pervious Paving Pilot Project

a. General Summary: It is in the ongoing interest of UCSC to maximize storm water infiltration and to continue to experiment with pervious paving/surfaces. UCSC will continue to evaluate new products and new applications. During Permit Years 3 and 4, UCSC will identify a pilot project for pervious paving. A thorough post-construction evaluation of the pilot project will determine if the following or its equivalent shall be added to the Campus Standards Handbook: Pervious pavement should be used in parking lots or in walkways except where limited by constraints such as vegetative detritus, accessibility compliance under ADA, emergency vehicle access, soil permeability or other constraints.

b. Status of Measurable Goals

56.1: Pervious paving pilot project(s) completed and evaluated. Changes made to Campus Standards or justification for rejection included in annual report.

Status for Year Three

6 pervious paving stalls were installed as part of the Biomedical Building project. The project was completed in March 2012 and therefore we have not had a chance to evaluate the performance during a winter. The Storm Water Program will assign a storm water intern to evaluate the pervious paving over winter 2012 and will then determine whether it is an appropriate application for UCSC.

Supporting Documents/Location

Project plans for Biomedical Building / PP&C project files

- c. Appropriateness (Scale 0-9 high): 9
- d. Effectiveness: NA
- e. Summary of Next Year's Activity: Assign a stormwater intern to evaluate the performance of pervious paving project. Appropriate University staff to determine appropriateness of pervious paving on Campus. Add to Campus Standards if it is determined to be an effective tool.
- 57 MSC Planning and Design Requirements for Storm Water Management and Watershed Protection
- **a. General Summary:** The CLRDP is the land use plan for the physical development of the 98-acre Marine Science Campus (formerly Long Marine Lab), including Younger Lagoon Reserve. The CLRDP contains comprehensive provisions for storm water management and watershed protection as the Marine Science Campus is developed. Included in the CLRDP are policies, policy implementation measures, a Resource Management Plan and a Drainage Concept Plan that taken together will ensure that development will protect and in some areas enhance the watershed.
- b. Status of Measurable Goals
- **57.1:** Implement the storm water components of the CLRDP. Annually provide a summary of implementation. *Status for Year Three*

The Coastal Biology Building, MSC Environmental Health and Safety Facility, MSC Parking Phase 1, Nature Education Facilities, and Specific Resources Plan Phase 1 projects were approved in January 2012. However, no new development under the CLRDP requiring construction of storm water management facilities has been constructed or is under construction, so requirements for new development have not been implemented. The Campus is implementing source control measures for existing development as specified in the Drainage Concept Plan. The Younger Lagoon Reserve began implementation of the first phase of the Resource Management Plan.

Supporting Documents/Location

CLRDP Annual Report for 2011, including the Water Quality Report and the Annual Report for the Younger Lagoon Reserve. / CLRDP Annual Report files in PP&C office and on the internet at http://lrdp.ucsc.edu/cmitigation-monitoring.shtml

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: For all four monitoring periods of 2011 the Long Marine Lab discharge was in full compliance in all aspects of the applicable waste discharge permit (General Permit for Discharges from Aquaculture and Aquariums [NPDES Permit No. CAG993003]). The Campus is implementing source control measures for existing development as specified in the Drainage Concept Plan.
- **e. Summary of Next Year's Activity:** Implement the storm water components of the CLRDP and provide an annual summary of implementation.

- 58 MBEST Planning and Design Requirements for Storm Water Management and Watershed Protection
- **a. General Summary:** The Master plan for the MBEST Center requires that all surface runoff from new development to be directed to 10-year retention basins for infiltration with any overflow directed to a 100-year retention basin. Ten-year retention basins are owned and operated by MBEST. Hundred-year retention basins are maintained by the City of Marina. Ten-year retention basins are inspected monthly and maintained as needed.

b. Status of Measurable Goals

58.1: Infiltration basins are included in all new development.

Status for Year Three

No new development at MBEST

Supporting Documents/Location

Email from Graham Bice / PP&C Stormwater program files

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: NA, no new development during Year 3.
- **e. Summary of Next Year's Activity:** Include infiltration basins in all new development at the MBEST Center.

59 Staff Training on Hydromodification and Low Impact Development

a. General Summary: All Project Managers in PP&C and in PP-Work Management, as well as PP&C inspectors shall be trained in LID and Hydromodification. As of Fall 2007 all current affected staff had participated in some training related to LID. As the LID checklist and other measures are phased in the training will be updated to reflect evolving wisdom and requirements. Efforts will be made to retrain all affected staff annually, at a minimum 50% of affected staff shall participate in annual retraining.

b. Status of Measurable Goals

59.1: At a minimum 50% of affected staff participate in annual retraining by end o fjoint effort quarter 8 *Status for Year Three*

Annual construction storm water training held in September of each year includes hydromodification and LID training. At least 50% of affected staff participated.

Supporting Documents/Location

Training sign in sheets / PP&C storm water files

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: BMPs 55, 56 and 57 were implemented as described. BMP 58 is required for new development at the MBEST Center, which did not occur in Year 3.
- e. Summary of Next Year's Activity: At least 50% of affected staff participate in annual retraining.

60 Operation and Maintenance of New Development BMPs

a. General Summary: As a non traditional MS4 UCSC is the final owner of nearly all structural BMPs. To ensure long term maintenance of BMPs installed in new construction, UCSC will add new structural BMPs to BMP #78: Storm Drain Systems Inspection and Preventative Maintenance. If Grounds Services is not identified as the responsible department, the identified department will adopt an appropriate inspection and maintenance schedule. Or for BMPs installed in areas which will be leased by others, long term maintenance will be assured by including an operation and maintenance requirement in the governing documents, such as the Covenants, Conditions and Restrictions (CC&R) or other appropriate documents.

b. Status of Measurable Goals

60.1: Prior to final completion of project, responsibility for long term maintenance of all new structural BMPs has been assigned and accepted.

Status for Year Three

Two projects were completed during year 3 with structural BMPs requiring long term maintenance, Cowell Student Health Center Expansion, Biomedical Building. Grounds Services participated in the final site walks for each project, along with the Project Manager and the Contractor, to discuss all new site development. During these walks both the Project Manager and Contractor provide Grounds Services with any necessary information including maintenance manuals to assist in long term maintenance.

Supporting Documents/Location

Maintenance log books kept by Grounds Services, which include the areas associated with newly completed projects. / Grounds Services office.

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: No reports to the illicit discharge reporting system regarding maintenance of structural BMPs
- **e.** Summary of Next Year's Activity: Responsibility for long-term maintenance of all new structural BMPs has been assigned and accepted prior to final completion of project.

6. POLLUTION PREVENTION FOR OPERATIONS AND MAINTENANCE

62 Storm Water BMP Training

a. General Summary: On an annual basis, key employees receive training on general storm water awareness and on applicable BMPs to protect storm water quality. All pollution prevention training / public education and outreach documents will discuss permissible and impermissible activities as well as how to report concerns.

Training may utilize the Electronic Brochures and Flyers described in BMP #1.

b. Status of Measurable Goals

62.1: At least 90% of applicable PP-Grounds employees will participate in initial training. At least 90% of applicable PP-Grounds employees will be retrained annually.

Status for Year Three

At least 90% of applicable Grounds employees attended the annual storm water training.

Supporting Documents/Location

Storm Water training sign in sheets / PP&C storm water files

62.2: At least 90% of applicable CUHS-Facilities employees will participate in initial training. At least 90% of applicable CUHS-Facilities employees will be retrained annually. Training conducted annually by responsible department.

Status for Year Three

At least 90% of applicable CUHS facilities employees attend the annual storm water training presented by the storm water manager.

Supporting Documents/Location

storm water training sign in sheets / PP&C storm water files

62.3: At least 90% of applicable LML-Facilities employees will participate in initial training. At least 90 % of applicable LML-Facilities employees will be retrained annually.

Status for Year Three

At least 90% of applicable LML facilities employees participated in the storm water training

Supporting Documents/Location

Storm water training sign in sheets / PP&C storm water files

62.4: Participation by 100% of applicable MBEST staff in Year1. Participation by at least 50% of applicable MBEST staff in Years 2-5.

Status for Year Three

At least 50% of applicable MBEST staff participated in storm water training

Supporting Documents/Location

Training sign in sheets / PP&C storm water files

62.5: At least 90% of applicable TAPS Maintenance employees will participate in initial training. At least 90 % of applicable TAPS Maintenance employees will be retrained annually.

Status for Year Three

The Parking Manager and our Maintenance Staff attend all safety meetings, including special meetings targeted to Storm Water Management training.

Supporting Documents/Location

Sign in sheet for Grounds Safety Meetings / On File with Grounds Dept.

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge reporting system regarding dry weather outfall flows.
- **e. Summary of Next Year's Activity:** At least 90% of applicable employees in PP-Grounds, CUHS-Facilities, and TAPS-Maintenance, and 50% of applicable MBEST staff participate in retraining.

63 Equipment and Materials Storage Areas

a. General Summary: This BMP applies to equipment and material storage areas for UCSC facilities operations.

b. Status of Measurable Goals

63.1: Equipment and material storage requirements are included in all training required by BMP #62.

100% of noted CUPA inspection deficiencies corrected within 30 days.

Status for Year Three

Equipment and materials storage requirements were included in all training sessions. According to EH&S, 100% of inspection deficiencies noted by the Santa Cruz County Environmental Health Services (the Certified Unified Program Agency [CUPA] for Santa Cruz County) were corrected within 30 days.

Supporting Documents/Location

Powerpoint presentations and sign-in sheets for all training sessions. / Storm Water Program files in PP&C and Environmental Programs files in EH&S.

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge reporting system related to facilities equipment and materials storage areas.
- **e. Summary of Next Year's Activity:** Include equipment and material storage requirements in all training required by BMP #62; correct 100% of noted CUPA inspection deficiencies within 30 days.

Washing University Owned Vehicles

a. General Summary: Most University vehicles are washed at the Fleet Services wash station, which discharges to the sanitary sewer. Grounds Services also maintains a wash station connected to the sanitary sewer; however, this station is primarily intended for cleaning Grounds Services equipment. OPERS (Office of Physical Education, Recreation, Sports, and Wellness) has been using a dry cleaning method with good success for more than a year to clean the exteriors of nine vehicles. Private vehicles are not routinely washed at UCSC. Student residents generally do not have access to washing equipment. In BMP # 25, UCSC has made commitments to reviewing the limited instances where private vehicles might be washed.

b. Status of Measurable Goals

64.15: Vehicle washing requirements are included in all training required by BMP #62.

Status for Year Three

Vehicle washing requirements were included in all training sessions.

Supporting Documents/Location

Powerpoint presentations and sign-in sheets for all training sessions. / Storm Water Program files in PP&C.

c. Appropriateness (Scale 0-9 high): 9

- **d.** Effectiveness: There were no reports to the illicit discharge reporting system related to vehicle washing.
- e. Summary of Next Year's Activity: Vehicle washing requirements are included in all training required by BMP #62.

68 Street and Parking Lot Maintenance in Faculty/Staff Housing

a. General Summary: Prevent storm water contamination from roads and parking lots. Streets and parking lots associated with Faculty/Staff Housing shall be cleaned not less than once annually. One cleaning shall occur prior to the wet season.

b. Status of Measurable Goals

68.1: Cleaning is performed according to established schedule.

Status for Year Three

Standing Work Order with Campus Physical Plant exists to perform street sweeping on an as needed basis, but not less than once per month.

Supporting Documents/Location

Record of each street sweeping event is recharged to Employee Housing. / Documentation is kept in Physical Plantís FAMIS database.

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge reporting system or to the Faculty/Staff Housing Office related to this item.
- **e.** Summary of Next Year's Activity: Clean streets and parking lots according to the established schedule.

69 Food Service BMPs

a. General Summary: To ensure storm water quality is not negatively affected by food service activities, BMPs were selected by the BMP Development Team for Food Service Facilities (refer to BMP #18). The practices selected cover the following activities: washing of equipment, cleaning loading docks, cleaning outdoor dining areas, handling and disposal for fats, oil and grease (FOG), and handling of solid wastes and recyclable materials. These practices are to be implemented starting in Year 1. Where current facilities are inadequate to fully implement these BMPs a plan for future improvements (such as capital projects) will be developed and implemented.

b. Status of Measurable Goals

69.1: Operating procedures developed and implemented at each facility. Where current facilities are inadequate to fully implement these BMPs, a plan for future improvements (such as capital projects) was developed and is being implemented.

Status for Year Three

Operational procedures in place at all Dining locations. Wash water containment improved at Cowell

College Dining Kitchen through capital project.

Supporting Documents/Location

Dining BMP documents. / Documents located at all Dining kitchen locations.

69.3: Training conducted annually by responsible department.

Status for Year Three

Dining conducted training as part of Dining University in September, 2011.

Supporting Documents/Location

Training sign-in sheets / UCSC Dining

69.5: Training conducted annually by responsible department.

Status for Year Three

Facilities Dining maintenance staff trained as part of departmental BMP training conducted by Courtney Trask.

Supporting Documents/Location

Training sign-in sheets kept by Facilities Training Coordinator. Post-training quiz conducted. /

69.6: Training conducted by responsible department.

Status for Year Three

An Introduction to Storm Water Management BMPs is provided at on-boarding for all new Dining employees. All on-boarding is documented by Dining Trainer/Translator.

Supporting Documents/Location

Employee files

training records / CUHS dining services

69.8: Training conducted by responsible department.

Status for Year Three

New employee training was conducted for both new career employees (as part of on-boarding and all-staff training) and student maintenance assistants (as part of onboarding /job safety training.)

Supporting Documents/Location

New employee on-boarding checklists and all-staff training sign-in sheets. / With Zone supervisors and Safety, Training and Sustainability Coordinator.

69.9: 100% of observations corrected within 30 days of notification by EH&S.

Status for Year Three

All storm water observations were addressed within 30 days by correcting the issue through education, maintenance or creating a project to be funded for construction.

Supporting Documents/Location

Inspection records

email responses to corrections / PP&C storm water program files

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge system related to Food Service BMPs.
- **e. Summary of Next Year's Activity:** Implement operating procedures at each facility; conduct training for applicable CUHS-Dining and CUHS-Facilities employees, and include storm water training to applicable new employees in these units.

75 Fleet Services BMPs from SWPPP

a. General Summary: The Central Garage is covered under the General Permit for Industrial Facilities. Therefore, the Central Garage shall continue the BMPs described in the SWPPP developed for compliance with the Industrial General Permit. As required by the State General Permit for Storm Water Associated with Industrial Activities, an annual assessment of the Fleet Services monitoring plan, data and BMP effectiveness is conducted and included in the Annual Report submitted to the Regional Board in compliance with WDID#344I001727.

b. Status of Measurable Goals

75.15: The effectiveness of BMPs and their implementation to be reviewed during annual compliance review inspection as required by the State General Permit for Storm Water Associated with Industrial Activities, WDID#344I001727.

Status for Year Three

Annual inspection completed as required by State General Permit for Storm Water Associated with Industrial Activities, WDID#344I001727.

Supporting Documents/Location

Annual Inspection document / PP&C Industrial Permit files SWPPP document on site at Fleet Services

- c. Appropriateness (Scale 0-9 high): 9
- d. Effectiveness: NA
- **e.** Summary of Next Year's Activity: Continue to implement the SWPPP developed for the Industrial General Permit. Conduct annual compliance review.

76 Integrated Pest Management Program

a. General Summary: UCSC practices an Integrated Pest Management Program (IPM) led by the Physical Plant Grounds Department. The Physical Plant Pest Management Office identifies which alternative pest control strategies can be used effectively, and is continually researching safer alternative pest control methods and products. The IPM program requires the least toxic and effective means for use are utilized.

Any use of a pesticide by UCSC and/or contracted private firms must obtain prior approval from the Environmental Health & Safety Office.

b. Status of Measurable Goals

76.1: Campus pesticide use complies with campus IPM program.

Status for Year Three

All pest management operations carried out by Grounds Services were made using least toxic methods possible and were consistent with IMP practices. Any pesticides used were approved by EH&S.

Supporting Documents/Location

UCSC Campus Grounds Department, Integrated Pest Management Practices, Alternative Pest Control Strategies /

- a. Appropriateness (Scale 0-9 high): 9
- **b.** Effectiveness: There were no reports to the illicit discharge reporting system related to this item.
- c. Summary of Next Year's Activity: Campus pesticide use consistent with campus IPM program.

77 Cleaning Streets and Parking Lots

a. General Summary: Streets and parking lots are cleaned to remove vehicle contaminants, leaf litter, sediment, and litter in order to prevent them from being carried into drainage channels during the rainy season

UCSC has an existing Street Sweeping Program. This service is provided by Physical Plant-Grounds Services on all Main Campus roads. Primary roads are swept monthly. Secondary roads are swept on a bimonthly basis. During the fall and spring seasons, street sweeping may be conducted more frequently to respond to seasonal requirements. At the Marine Science Campus, street sweeping is provided by Physical Plant-Grounds Services for the one road. There are no streets at 2300 Delaware. Streets at MBEST are maintained by the City of Marina.

TAPS will continue to maintain parking lots and bus stops on the Main Campus. PP-Grounds or TAPS will maintain MSC and 2300 Delaware parking lots. MBEST will maintain the two parking lots at MBEST.

b. Status of Measurable Goals

77.2: MSC: Street sweeping is conducted 4 times per year.

Status for Year Three

Grounds Services Equipment Crew performed street sweeping of the roads at MSC on a quarterly basis or more frequently.

Supporting Documents/Location

Ron use this one SWEEPER LOG FY 2011-12.xls / Grounds Server

77.25: Main Campus streets: Primary roads are swept monthly. Secondary roads are swept on a bimonthly basis.

Status for Year Three

A couple primary roads were missed in July 2011 and March 2012. Otherwise all swept at least once monthly. All secondary roads swept at least once every other month. Typically more.

Supporting Documents/Location

Ron use this one SWEEPER LOG FY 2011-12.xls / Grounds server

77.3: All parking lots shall be cleaned at least 10 times per year.

Status for Year Three

Due to staffing issues not all parking lots were cleaned at least times per year. 87 of 107 total lots were cleaned at least 10 times. The remaining 20 lots were cleaned an average of 6 times per year.

Supporting Documents/Location

Log Sheets of which lots were cleaned by date. / Log sheets are kept in a binder in the Parking Manageris office.

77.5: Establish and maintain a schedule for servicing parking lots.

Status for Year Three

Grounds Services performs storm drain maintenance and street sweeping of parking lots on a work order basis.

Supporting Documents/Location

FAMIS Work Order WO00353374 / FAMIS work order system

77.6: MBEST will clean parking lots once per year. Catch basins will be maintained once per year.

Status for Year Three

MBEST parking lots and catch basins were cleaned and maintained.

Supporting Documents/Location

Invoice from Clean Sweep listing services rendered and date services were performed. / PP&C Storm water files

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge reporting system related to this item. There were 2 work order requests related to storm drain issues and one standing work order for parking garage.
- **e.** Summary of Next Year's Activity: Streets, parking lots ant catch basins maintained according to schedule specified in the BMP.

Storm Drain Systems Inspection and Preventative Maintenance

- **a. General Summary:** UCSC will continue to inspect and maintain engineered storm drain systems in developed areas to address infiltration, sediment, oil and grease. A three-faceted approach is utilized for the storm drain inspection and preventative maintenance:
 - 1) Grounds equipment operators make annual PM inspections encompassing over 400 storm drain systems, change oil absorbent socks, and check flow as needed. Deficiencies are logged and prioritized. An annual inspection is also performed for engineered detention tanks/vaults/oil separators, drainage swales, and detention basins. Engineered detention facilities are cleaned as needed by contract with private vendors.
 - 2) The groundskeepers perform weekly inspections of the systems from October through March and monthly or as needed the remainder of the year. The groundskeepers clean the catch basin grates and outfalls as needed, sign-off that the inspections were completed and contact their supervisor if they have any problems.
 - 3) During a storm event, the groundskeepers check their area storm drains several times a day and the equipment operators respond to area concerns as needed with specialized storm drain clearing equipment. Natural drainages are included in the storm event inspections whenever possible.

b. Status of Measurable Goals

78.15: Inspection and maintenance is implemented according to schedule.

Status for Year Three

Grounds performs annual inspection and ongoing maintenance of UCSC Storm Drain systems according to the schedule. Campus Gardeners perform maintenance on a daily basis.

Supporting Documents/Location

Storm Drain Maintenance Folder 2011-2012, Gardeners preventive maintenance checklists / Grounds

Services Office

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge reporting system related to this item. There were 2 work order requests related to storm drain maintenance.
- **e.** Summary of Next Year's Activity: Continue to inspect and maintain engineered storm drain systems in developed areas.

79 Campus Recycling Program

a. General Summary: The Refuse / Recycling Program currently collects material throughout all areas of campus. Members of the UCSC community can easily discard their materials in readily available containers, thus reducing the amount of litter otherwise carried into drainage channels during the rainy season. The campus waste management program works to preserve natural resources by encouraging recycling and reuse of materials. Additionally, Grounds personnel patrol campus roads, paths and landscapes collecting litter. This program will continue throughout Permit Years 1-5.

b. Status of Measurable Goals

79.1: The Grounds Services waste management program continues to provide recycling services for the Main Campus and MSC.

Status for Year Three

The Grounds Services waste management program continues to provide recycling services for the Main Campus and MSC.

Supporting Documents/Location

A description of the recycling program and maps showing locations of recycling bins on on the Physical Plant website. Grounds Services keeps records of the percentage of waste that is recycled. / Grounds Services files. Physical Plant website

http://ucscplant.ucsc.edu/ucscplant/Grounds/index.jsp?page=Recycling Refuse

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: There were no reports to the illicit discharge reporting system related to this item.
- **e.** Summary of Next Year's Activity: Continue to collect and re-direct discarded material. Make refuse/recycling containers readily available and service them regularly.

81 Grounds Services: Landscape Maintenance and Turf Management

a. General Summary: PP-Grounds Services will continue its Landscape Maintenance and Turf Management Program throughout Permit Years 1-5.

b. Status of Measurable Goals

81.15: Grounds Maintenance continues existing practices including hazardous materials use minimization, mulching, and litter control.

Status for Year Three

Area gardeners complied with the BMP restrictions.

Supporting Documents/Location

Groundskeeper checklists / Grounds Services files

Typical sample already attached.

81.2: Turf management program continues existing practices for water management, fertility management, soil aeration, sanitation and mowing to maximize turf utility with minimal off-turf impacts.

Status for Year Three

Grounds continues to operate RainMaster Evolution controllers where installed and adjusts irrigation schedules for stand alone clocks based on local et. Lawns are aerated and fertilized twice a year. Mowing equipment is cleaned frequently to reduce weed importation.

Supporting Documents/Location

FAMIS TURF SWO time recording / FAMIS

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: There were no reports to the illicit discharge reporting system related to this item.
- e. Summary of Next Year's Activity: Continue to provide landscape maintenance and continue existing turf management program.

Maintenance of Fountains and Decorative Water Bodies

- **a. General Summary:** CUHS and PP-Grounds will collaborate to develop and implement fountain and decorative pool maintenance processes and procedures that ensure discharges will not negatively impact storm water quality. CUHS Facilities and PP-Grounds will collaborate by the end of Permit Year 2.
- b. Status of Measurable Goals
- **82.2:** Maintenance BMPs are implemented for all water features beginning in Permit Year 3.

Status for Year Three

Decorative water bodies (DWB) BMPis have been established and implemented

Supporting Documents/Location

BMPMaintenanceFDWB6 20 11 / PP Grounds server

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: There were no reports to the illicit discharge reporting system related to this item.
- e. Summary of Next Year's Activity: Implement the BMPs that were established during Year 2.

83 Household Hazardous Waste Minimization

a. General Summary: For the primary purpose of minimizing abandoned and hard-to-handle household hazardous waste, CUHS will continue distribution of selected cleaning products to applicable student living areas; accept return of unused products at the end of the academic year; and as needed, provide for proper disposal of any unusable products. This is a combined effort from Student Residents and CUHS-Facilities to minimize waste and toxics normally produced by residential facilities.

b. Status of Measurable Goals

83.1: CUHS Facilities will report annually on the quantity of household hazardous waste collected.

Status for Year Three

CHES Facilities continues to distribute and recycle supplies provided for the self-cleaning of apartments by residents. Supplies left by residents at the end of the school year are used to restock apartments for the following year. Unusable products are disposed of through the campus household waste disposal program.

Supporting Documents/Location

Instructions provided to residents on requesting and disposing of household products; waste manifests maintained by zone Supervisors. /

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge reporting system related to household hazardous waste.
- **e.** Summary of Next Year's Activity: Continue distribution of selected cleaning products; accept return for unused products at the end of the academic year; and provide residents with information about proper use and disposal.

85 Custodial Services BMPs

a. General Summary: On an annual basis, PP-Custodial Services employees receive training on general storm water awareness and on applicable BMPs to reduce storm water contamination.

Training may utilize Electronic Brochures and Flyers for General Storm Water Awareness and Targeted Topics (BMP #1).

Training will begin Permit Year 1.

b. Status of Measurable Goals

85.1: Custodial BMPs are integrated into the work routine.

Status for Year Three

All staff have been trained on appropriate BMPs. Custodial poster has been developed in English and Spanish. Posters have been placed in employee break rooms or community spaces and employees notified of their locations.

Supporting Documents/Location

Posters, brochures, training sign-in sheets. / Storm Water Program File in PP&C

85.2: At least 90% of applicable PP-Custodial employees will participate in initial training. At least 90 % of applicable PP-Custodial employees will be retrained annually.

Status for Year Three

At least 90% of applicable staff were retrained.

Supporting Documents/Location

Custodial training sign in sheets / PP&C stormwater program files

85.3: At least 90% of applicable PP-Custodial new employees receive storm water training during new employee orientation.

Status for Year Three

No new hires since 2008

Supporting Documents/Location

email from George Valerga / PP&C stormwater files

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: There were no reports to the illicit discharge system related to custodial services.
- e. Summary of Next Year's Activity: Custodial BMPs are integrated into the work routine; at least 90% of applicable PP-Custodial employees will be retrained; at least 90% of new employees receive storm water training during new employee orientation.

86 Building Exterior Maintenance BMPs

a. General Summary: The BMPs affecting building exterior maintenance operations will be developed by the Building Exterior Maintenance BMP Development Team (BMP #34) during Permit Year 1 and will include an implementation schedule.

b. Status of Measurable Goals

86.1: BMPs implemented according to schedule.

Status for Year Three

The exterior building maintenance BMPs were implemented for all exterior building maintenance projects starting July 1st 2010, consistent with the schedule developed in Year 1.

Supporting Documents/Location

Training records, including sign-in sheets and presentation files. / PP&C Storm Water files

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: There were no reports to the illicit discharge system related to building maintenance
- **e. Summary of Next Year's Activity:** Implement BMPS affecting building exterior maintenance operations.

90 Water Line Flushing

a. General Summary: Water line flushing is performed by PP-Plumbing and by the UCSC Fire Department to maintain potable water supply and to verify hydrant flows. During water line flushing,

diverters or other means will be used to avoid erosion or damage to landscaping (plantings, mulches, etc.). Water line flushing by PP-Plumbing and the campus Fire Department will continue through Permit Years 1-5 in a manner that prevents erosion and damage to landscaping.

b. Status of Measurable Goals

90.1: Erosion or other landscape damage does not occur during water line flushing.

Status for Year Three

The Fire Department does not conduct water line flushing. When flowing a fire hydrant or automatic sprinkler system a diffuser is used whenever possible. New automatic sprinkler systems are designed to have the inspectors test port flow directly to the sanitary sewer.

Supporting Documents/Location

NA/NA

90.2: Erosion or other landscape damage does not occur during water line flushing.

Status for Year Three

Plumbing department did not perform line/hydrant flushing preventative maintenance for year 3.

Supporting Documents/Location

NA /

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: There were no reports to the illicit discharge reporting system related to water line flushing.
- **e.** Summary of Next Year's Activity: During water line flushing, diverters or other means will be used to avoid erosion or damage to landscaping.

91 Vehicle Maintenance Prohibitions

a. General Summary: TAPS parking policies and residential rental agreements prohibit vehicle maintenance on campus, except at the campus Central Garage facility (covered by a SWPPP, see BMP #75). This policy and the rental agreements prevent oil, grease, heavy metals, and chemicals from being carried into storm water runoff.

b. Status of Measurable Goals

91.1: Vehicle maintenance prohibitions remain in place in parking policies.

Status for Year Three

UC Code 13 states that no repairs, other than emergency repairs of a minor nature, shall be made on privately owned motor vehicles on campus. This regulation is enforced by Parking Enforcement, a unit with the University Police.

Supporting Documents/Location

UCSC Traffic and Parking Regulations. / http://www2.ucsc.edu/police/parkreg.html

91.2: Vehicle maintenance prohibitions remain in place for residential rental agreements.

CUHS will provide information about vehicle maintenance prohibition (and other storm water related

policies) to residents in either electronic or paper format on an ongoing basis.

Status for Year Three

Prohibitions remain in place regarding resident maintenance of vehicles on campus. This is communicated in campus housing guides and the residential Terms & Conditions. This responsibility is shared with TAPS and UCPD, who enforce these restrictions in all parking lots associated with Housing facilities.

Supporting Documents/Location

Terms & Conditions and resident educational publications. / CUHS files

- c. Appropriateness (Scale 0-9 high): 9
- d. Effectiveness: NA
- **e.** Summary of Next Year's Activity: Continue TAPS parking policy that prohibits vehicle maintenance on campus, except at the Central Garage facility. Vehicle maintenance prohibitions remain in place for residents of Campus housing.

93 **Pet Prohibitions**

a. General Summary: UCSC has a policy of prohibiting most pets on the Main Campus, the developed areas of the Marine Science Campus and at 2300 Delaware. See:

http://www.ucsc.edu/ppmanual/html/sps0005.htm. This policy reduces the occurrence pathogen/coliform contamination in storm water from domestic animals.

b. Status of Measurable Goals

93.1: UCSC continues to have a policy that restricts domestic animals on campus.

Status for Year Three

Animal policy still exists and is enforced.

Supporting Documents/Location

Call/contacts are documented in Department's RIMS system. / Police Departments RIMS system

- c. Appropriateness (Scale 0-9 high): 9
- d. Effectiveness: NA
- e. Summary of Next Year's Activity: UCSC continues to have a policy that restricts domestic animals on campus.

94 Homeless Encampments

a. General Summary: The Main Campus, 2300 Delaware and the Marine Science Campus are all controlled access facilities. These three facilities are closed at night and access is restricted to those individuals with a stated purpose for being at the facility. Homeless encampments have not been an issue at MBEST. This BMP addresses pathogen contamination of storm water, in addition to other potential constituents of concern, associated with homeless encampments.

b. Status of Measurable Goals

94.1: University Police enforce night access policies.

If homeless encampments are found, summary of control activities reported.

Status for Year Three

The Police Department staff deal with night access and illegal camps. When located, camps are removed in cooperation with Campus Facilities.

Supporting Documents/Location

Cases are open and kept on record (RIMS System) for illegal campsites. / Police Departments RIMS System

- c. Appropriateness (Scale 0-9 high): 9
- **d. Effectiveness**: Homeless encampments are an ongoing issue at UCSC. Police officers deal with illegal camps when located and remove them in cooperation with Physical Plant, and make contact with all campers when they are located.
- **e.** Summary of Next Year's Activity: University Police enforce night access policies. If homeless encampments are found, summary of control activities is reported.

95 Hazardous Waste Management Program

a. General Summary: EH&S operates a program for hazardous waste collection and disposal for all UCSC hazardous waste generators. This program includes electronic container tracking; collection of materials from generators; and disposal of materials in accordance with federal and state requirements. Several times per year, EH&S offers to the UCSC community training for hazardous waste generators on proper classification and handling techniques for hazardous wastes.

b. Status of Measurable Goals

95.1: On an annual basis, Hazardous Waste Manager summarizes program effectiveness and any changes made.

Status for Year Three

It is required that all generators use the electronic container tracking system - the Online Tag Program (OTP). Improvement patches to the Online Tag Program (OTP) have been implemented to make the tracking system robust. These improvements include deep linking, containers reaching max accumulation and moved to ready for pick up, containers will receive the actual moved off site date when shipped, container size filed will not let the user input O and contacts page was updated. These improvements made the OTP a more effective tool for the tracking and labeling of hazardous waste on campus.

Supporting Documents/Location

All data is electronic and available to anyone who would like to see the process. / otp.ucsc.edu you will need a username and password.

95.2: On an annual basis, Hazardous Waste Manager will provide the number of campus community members that have successfully completed the hazardous waste training course.

Status for Year Three

Yes, forty-two member of the campus community were trained.

Supporting Documents/Location

I have sign in sheets for all of the attendees to the Hazardous Waste Management Class. / File cabinets at EH&S office or in the EH&S training database.

- c. Appropriateness (Scale 0-9 high): 9
- **d.** Effectiveness: There were no reports to the illicit discharge reporting system related to this item.
- **e.** Summary of Next Year's Activity: Continue existing hazardous waste management practices and continue to offer training for hazardous waste generators.

96 Hazardous Materials Emergency Response Organization

c. General Summary: UCSC operates an emergency response team for hazardous materials that are in or may enter the storm drain system, as described in the UCSC Hazardous Materials Management Plan. EH&S is an integral component of this team. EH&S staff oversees the proper stabilization, clean-up and disposal of spilled hazardous materials and initiates corrective actions to prevent recurrences. This BMP applies to Main Campus, Marine Science Campus and 2300 Delaware.

d. Status of Measurable Goals

96.1: Hazardous Materials Emergency Response Organization continues to provide response to hazardous materials releases.

Status for Year Three

EH&S continues to provide response to hazardous materials release.

Supporting Documents/Location

Emergency response records / EH&S office

- **f.** Appropriateness (Scale 0-9 high): 9
- **g. Effectiveness**: There were no reports to the illicit discharge reporting system related to this item.
- h. Summary of Next Year's Activity: Continue to respond to reports of spilled hazardous materials.

7. UCSC Specific Measures to Reduce Storm Water Impacts

100 Stormwater Infrastructure Improvements

a. General Summary: This project includes infrastructure improvements, for issues identified in the Stormwater and Drainage Master Plan at locations along campus stream channels and drainages. Design and construction of the improvements are anticipated to take place in multiple phases over a multi-year period. Phase I will focus on erosion problems at the top of the drainage channels and some repairs in severely eroded areas. Phase II will focus on erosion problems within the drainage channels.

b. Status of Measurable Goals

100.1: Phases I and II are completed in 5 years.

Progress to be reported in annual SWMP report.

Status for Year Three

Phase 1 is completed. Phase 2 design is complete and in the process of being prepared to submit for approval to put out to bid.

Supporting Documents/Location

Phase 1 project files

Phase 2 project plans / PP&C project files

- c. Appropriateness (Scale 0-9 high): 9
- d. Effectiveness: NA
- e. Summary of Next Year's Activity: Work toward completion of Phase 2

101 Water Quality Monitoring

a. General Summary: The campus has been conducting surface and groundwater quality monitoring for eighteen years. Samples have been collected annually at nine campus locations and analyzed for 40 water quality parameters. An annual assessment of the monitoring program will include an evaluation of the appropriateness of sample locations, monitoring frequencies and water quality parameters in terms of maintaining continuity with the historic data and providing meaningful data to inform the SWMP. The annual assessment may dictate monitoring plan amendments to be implemented in subsequent years. Subsequent monitoring requirements may be reduced based upon analytical results collected.

b. Status of Measurable Goals

101.1: On an annual basis, the monitoring plan is implemented

Status for Year Three

The monitoring plan continues to be implemented.

Supporting Documents/Location

Water Quality Monitoring Report Exec Summary 2011 / 2012 / Env Managerís Files

- c. Appropriateness (Scale 0-9 high): 9
- d. Effectiveness: NA
- **e. Summary of Next Year's Activity:** Continue to conduct surface and groundwater quality monitoring, and evaluate the appropriateness of the monitoring program.

104 Encourage Alternative Transportation

a. General Summary: Reduce the use of personal automobile and associated impacts. UCSC will continue its existing and integrated approach to reduce the use of the personal automobile (and its associated impacts) by offering no-cost and low-cost commuting alternatives such as bus passes and

vanpools, charging parking fees that reflect the costs of providing parking services, providing bike paths, providing showers for bike riders, frequent on-campus shuttle service (including bike shuttles), etc.

b. Status of Measurable Goals

104.1: Commuting alternatives continue to be supported by UCSC.

Status for Year Three

TAPS continues to provide for and subsidize out of parking fees a Vanpool Program, Carpools, The Bike Shuttle, SC Metro Bus Passes and during the past year has made improvements to bicycle infrastructure. Although the numbers of alternative transportation users were down from 2010-2011, all commuting numbers were reduced with fewer vehicles accessing the campus, so the percentage of alternative transportation users was up slightly from 60% in 2010-2011.

Supporting Documents/Location

TAPS website (descriptions of alternative transportation options).

TAPS Mode Split Survey May 2012. / TAPS Website (options).

Directors Office (Mode Split Survey results)

- c. Appropriateness (Scale 0-9 high): 9
- d. Effectiveness: NA
- e. Summary of Next Year's Activity: Continue to support commuting alternatives.

107 Existing Storm Water System Review

a. General Summary: UCSC will formalize the program to characterize and evaluate the potential for contaminants to enter sinkholes and develop a plan to institute controls where the evaluation indicates potential for significant contaminant transport to a sinkhole.

b. Status of Measurable Goals

107.3: BMP Implementation Schedule is being met.

Status for Year Three

Improvements related specifically to sinkholes were assigned to Infrastructure Phase 4, which is in UCSCis 10-Year Capital Plan. Planning was scheduled to begin in 2013-14 but due to State budget issues, Capital Plan is currently being revised with an estimated Phase 4 planning start in 2014-15.

Supporting Documents/Location

Consolidated State & Non-State Capital Financial Plan 2011-21 /

http://budget.ucop.edu/capital/201121/2011-21ConsolidatedState&Non-StateCapitalFinancialPlan.pdf

- c. Appropriateness (Scale 0-9 high): 9
- d. Effectiveness: NA
- **e. Summary of Next Year's Activity:** Continue to develop and implement storm water infrastructure improvements as part of the Campusí phased infrastructure improvements projects.

108 Annual Program Review

- **a. General Summary:** In accordance with the general permit requirements, UCSC will prepare an annual report. The annual report will include:
 - 1. Status of compliance with permit conditions;
 - 2. Status of the identified measurable goals;
 - 3. An assessment of the appropriateness and effectiveness of the identified BMPs;
 - 4. Evaluation of information collected and analyzed, including applicable monitoring data;
 - 5. A summary of the storm water activities planned for the next permit year;
 - 6. Recommended amendments to the SWMP along with a justification for such changes; and
 - 7. Changes in responsibilities for implementing portions of the SWMP.

b. Status of Measurable Goals

108.1: Annual SWMP review is completed as described above.

Status for Year Three

Annual SWMP review completed. BMP evaluation is done by individual campus departments implementing the BMPs.

Supporting Documents/Location

Most of the evaluations are done in the Filemaker database. Those people who do not have access to the database are given hardcopy forms to complete and return to Stormwater Manager. / SWMP filemaker database

PP&C Stormwater files

- **c. Appropriateness** (Scale 0-9 high):
- d. Effectiveness: NA
- **e. Summary of Next Year's Activity:** Complete the annual review and the revised appropriateness and effectiveness plan.