City of Berkeley shall take one of the following actions with respect to the corresponding lower lateral:

a) In areas where the sewer main and lower laterals have been replaced since 1986 pursuant to the Sewer System Evaluation Study completed in 1985 by CDM Jordan/Montgomery which was prepared in response to Order No. 86-17 issued by the California Regional Water Quality Control Board, San Francisco Bay Region, and implementing plans adopted by the City of Berkeley, no action need be taken solely as a result of the triggering event.

b) In all other areas of the City of Berkeley, the City of Berkeley shall include the corresponding lower lateral in the routine inspection program required by subparagraph 40.B.1, and shall inspect the corresponding lower lateral within 30 days of notice of the triggering event. The results of such inspections shall be used in planning and scheduling as set forth in subparagraph 41.E.3.

42. Sub-Basin Flow Monitoring/I&I Assessment Plan

A. The City of Berkeley shall cooperate with EBMUD in the development of the Regional Flow Monitoring/Data Assessment Program described in Section V.A. of the EBMUD SO, and the Flow Modeling and Limits Report described in Section V.B. of the EBMUD SO.

B. On July 15, 2010, the City submitted, and EPA has reviewed and approved, a Sub-Basin Flow Monitoring/I&I Assessment Plan. The City shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved.

C. By December 1, 2012, the City of Berkeley shall submit a report to EPA for review and approval pursuant to Section XIV on the activities performed under the Sub-Basin Flow Monitoring/I&I Assessment Plan to provide the following:

1. Classification of Sub-Basins as high, medium, or low priority with regard to the relative quantities of significant infiltration to the Collection System;

2. Classification of Sub-Basins as high, medium, or low priority with regard to the relative quantities of significant inflow to the Collection System;
3. Identification of any bottlenecks in the Collection System which lack sufficient capacity to convey sewage flows through the Collection System and to the EBMUD interceptor during wet weather; and

4. A plan for using these results to identify and target high priority areas for repair and rehabilitation work.

43. Inflow Identification and Reduction

A. On July 15, 2010, the City of Berkeley submitted, and EPA has reviewed and approved, an Inflow Identification and Reduction Plan that describes how the City will implement a program to identify and reduce sources of direct storm water inflow, including roof leaders and drains directly connected to the Collection System, leaking manhole covers, and cross connections with storm drains. The City shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved.

B. Beginning in 2012, as part of the Annual Report provided for in Section XIII, the City of Berkeley shall submit the following information as it becomes available on implementation of the Inflow Identification and Reduction Program:

1. Locations and results of inflow testing done the previous year including the total number of illicit connections discovered;

2. Description of follow-up actions that were conducted including the number of illicit connections which were disconnected;

3. Description of enforcement actions taken against any property owner which did not comply with disconnection requirements;

4. Description of methods used to seal manhole covers in Collection System areas prone to flooding, and list of locations at which this work was done; and

5. A schedule for locations to be tested in the next year.

44. Sewer Cleaning And Inspection Program

A. On July 1, 2010, the City of Berkeley submitted, and EPA has reviewed and approved, a Sewer System Cleaning and Inspection Program Plan to ensure regular inspection and cleaning of sewer pipes. The City shall take the actions required by the Plan, in
accordance with the schedules and requirements of the Plan as approved. This Plan may be submitted in lieu of the Routine Inspection and Collection System Maintenance Protocols required by subparagraphs 40.B.1 and 40.B.2 upon a determination by EPA that the Plan meets or exceeds the criteria specified in subparagraphs 40.B.1 and 40.B.2.

B. Beginning in 2011, as part of the Annual Report provided for in Section XIII, the City of Berkeley shall provide information to EPA documenting activities conducted under its Sewer Cleaning and Inspection Program during the previous annual cycle, including miles of pipe cleaned and/or inspected as part of the routine and hot spot cleaning programs, and miles of pipe treated by each method used for controlling roots. The City shall include a description of the success of the Sewer Cleaning and Inspection Program at preventing blockages and SSOs as well as any changes to be made to the Program to further reduce SSOs. If EPA approves the Sewer Cleaning and Inspection Program in lieu of the Routine Inspection and Collection System Maintenance Protocols required by subparagraphs 40.B.1 and 40.B.2, the reporting required by this subparagraph may be incorporated into the section of the Annual Report pertaining to implementation of the Asset Management Plan provided for in subparagraph 40.C.

45. Computerized Maintenance Management System (MMS) On October 15, 2010, the City of Berkeley certified to EPA that the City’s MMS has been linked to a Geographic Information System (GIS) map of the Collection System, which is linked to an inventory of sewer Collection System assets that includes the available information on asset age, material, dimensions, and capacities, and locations of SSOs, along with information on inspection history, condition ratings and sewers repaired, rehabilitated, or replaced.

46. Sewer Repair, Rehabilitation and Replacement Beginning in 2011, as part of the Annual Report provided for in Section XIII, the City of Berkeley shall submit information to EPA documenting sewer repair, rehabilitation, or replacement activities completed in the previous year; describing projects to be completed in the next year; and discussing the reductions in flows and/or SSOs that have been achieved. Beginning in 2013, this information may be
incorporated into the section of the Annual Report pertaining to implementation of the Asset Management Plan provided for in subparagraph 40.C.

47. Annual Overflow Reports. Beginning in 2010, as part of the Annual Report provided for in Section XIII, the City of Berkeley shall submit a copy to EPA of the Annual Report of Sanitary Sewer Overflows ("Annual Overflow Report") required by the Regional Water Board. To the extent that the information is not included in the Annual Overflow Report, the City shall provide a listing of the number and location(s) of repeat SSOs a list of any SSOs in areas in which the sewer pipes have been rehabilitated, and a description of measures that will be taken to help prevent these SSOs in the future.

IX. WORK – CITY OF EMERYVILLE

48. Maintain Current Program. The City of Emeryville shall implement the programs for controlling SSOs and reducing I&I set forth in its SSMP.

49. Implement Improvements. The City of Emeryville shall implement improvements to its current programs needed to meet the requirements set out below in this Section. To the extent that an existing program satisfies the requirements of this Section, the City of Emeryville may submit a description of its program for review and approval by EPA pursuant to Section XIV.

50. Asset Management Program

A. The City of Emeryville shall participate and cooperate with EBMUD in the development of the EBMUD Template in accordance with the provisions of Section V.D., Paragraph 39 of the EBMUD SO. The City of Emeryville and Baykeeper reserve the right to comment on the EBMUD Template, and/or to submit an Alternative Template to EBMUD, EPA and the Regional Water Board, before the end of the ninety-day comment period set forth in the EBMUD SO. Upon completion of the EBMUD Template, following review of it and any other Alternative Template(s), EPA may provide comments for use as guidance by the City as the basis for the Asset Management Implementation Plan ("AMIP").

B. By July 15, 2012, the City shall submit to EPA for review and approval pursuant to Section XIV an AMIP that uses the EPA comments provided pursuant to
subparagraph A above. The City may tailor the EPA comments, and may omit portions of the
EPA comments that do not apply to the City. The AMIP shall be updated as necessary to
incorporate any revisions to the initial inspection and maintenance schedules, and to ensure that
repair, renovation and replacement projects continue to be adequately identified and planned
beyond the initial time frames specified in subparagraph 49.B.3. At a minimum, the AMIP shall
include a description of the City of Emeryville’s programs for:

1. **Routine inspection of the Collection System** according to a
specified schedule, and that includes the following:
   a) Inspection methods to be used, including direct visual
      inspection and CCTV inspection, and whether CCTV equipment is owned, purchased, leased, or
      a combination;
   b) An inspection schedule, and protocol for determining the
      regular time interval on which repeat inspections will be performed; and
   c) A system for timely evaluation of inspection findings and
documentation of the assessed condition.

2. **Collection system maintenance protocols, including:**
   a) A schedule for routine cleaning of the City of Emeryville’s
      Collection System using standardized responses developed by the City to typical local problems
      that cause blockages such as debris, grease and roots. The City shall develop its routine cleaning
      schedule after evaluating the cleaning needs of the Collection System;
   b) A list of locations where pipe blockages and SSOs have
      frequently occurred (hot spots), a hot spot cleaning schedule, and procedures for adjusting the
      hot spot cleaning schedule based on changing conditions;
   c) Preventive measures to address blockage of sewer pipes by
      roots, including a description of root control methods; locations where root control methods may
      be used within the Collection System; and a schedule for application of root control methods;
      and
   d) A plan for staffing the sewer system cleaning and root
control programs, indicating whether staffing duties will be carried out by agency staff, by staff from other agencies, or by private contractor(s). To the extent that any sewer cleaning or root control duties conducted under this program will be carried out by private contractor(s), the City of Emeryville shall retain on file and make available for inspection for a period of three years after the completion of work a description of each contractor and a copy of each contract, or a description of the procurement process.

e) A Quality Assurance and Quality Control Program (“QA/QC Program”) to ensure proper sewer cleaning. The QA/QC Program shall include a plan for inspecting the cleaning quality, which specifies a minimum percentage of cleaned pipe to be inspected at regular intervals and a schedule for inspections, the procedures for conducting the inspections, the time interval for any necessary re-cleaning, and criteria for increasing and decreasing the frequency of inspection.

3. Condition based repair and replacement of sewer pipe plan.

This plan shall include elimination of known improper flow connections, according to a schedule informed by the inspection results, and address both short-term (repairs of Acute Defects to occur within one year of completion of inspection and assessment) and long term repair, rehabilitation and replacement of sewer pipes. The plan shall include the following:

a) A schedule and 10 year financial plan for repair, rehabilitation, and replacement of sewer pipes. This schedule shall identify pipe reaches presently planned as priorities for rehabilitation or replacement over the next three years, with the understanding that the identified priorities are likely to be further developed and revised through the inspection and assessment process, and as a result of changed conditions. The City shall develop its schedule for repair, rehabilitation and replacement of sewer pipes using standardized responses developed by the City to observed defects, taking into account available peak flow rate data;

b) Measures to control the inflow and infiltration as needed to reduce flows in the Collection System and reduce the frequency of SSOs; and

c) The budget allocated for emergency repair and replacement
of sewer pipe, the length of sewer pipe which underwent emergency repair and replacement during the previous year, and the cost thereof.

C. Beginning in 2013, as part of its Annual Report provided for in Section XIII, the City of Emeryville shall submit information to EPA summarizing the City’s progress in implementing each element of the AMIP, and must include any proposed revisions to the maintenance and construction schedules along with any accompanying changes to the financial plan. If any Acute Defect has not been addressed within one year of the inspection and assessment identifying it, the City shall explain what new information or changed circumstances warrant not addressing the Acute Defect.

51. Private Sewer Lateral Inspection and Repair or Replacement Program

A. Consistent with the requirements at Section V.C., Paragraph 29 of the EBMUD SO, EBMUD adopted a Regional Private Sewer Lateral Ordinance (the “Regional Ordinance”) setting standards for the performance of sewer pipes that extend from privately-owned structures to the Satellites’ Collection Systems (“private sewer laterals”). The Regional Ordinance requires that each owner of a private sewer lateral show proof that the lateral meets the performance standards by obtaining (or already holding) a valid Compliance Certificate upon transfer of title of the structure, prior to obtaining a permit or other approval authorizing construction or significant modification of such structure at a cost in excess of $100,000, and prior to obtaining approval from EBMUD for a change in the size of the owner’s water service. The Regional Ordinance applies only to the portion of private sewer laterals that are on the property of the owner of the privately-owned structure (the “upper lateral”). Portions of the private sewer lateral connecting the upper lateral to the sewer main on public property, including public streets, (the “lower lateral”) are not addressed by the Regional Ordinance. The City of Emeryville has the option of either submitting an application to EBMUD for a determination that the City has a private lateral sewer lateral ordinance that is no less stringent than the Regional Ordinance (“No Less Stringent Application”), but has chosen to be covered under the EBMUD Regional Ordinance.
B. On October 15, 2010, the City of Emeryville submitted the following to EPA for review and comment (these documents do not require EPA approval):

1. Procedures for cooperating with EBMUD in the implementation of its private sewer lateral program within the City’s service area, including a description of the responsibilities that will be assigned to each City agency or department involved in the implementation of this program;

2. A statement that the City will include, as part of the application process for permits and approvals described in subparagraph 51.A, a requirement that the applicant submit a valid EBMUD Compliance Certificate; and

3. A copy of an agreement, if any, between the City and EBMUD regarding cooperation in the implementation of the private sewer lateral program, which may include a description of the City building permit process that requires permittees to submit compliance certificates prior to the City inspector’s completion of the final inspection.

C. The City of Emeryville shall provide to EBMUD the information required by and at the frequency determined necessary by EPA for implementation of the Regional Ordinance program.

D. **Lower Laterals**

1. The City of Emeryville shall continue its existing practice of, when replacing sewer mains, evaluating the condition of lower laterals connected to those sewer mains and replacing or requiring replacement of defective lower laterals. The City of Emeryville may issue a Compliance Certificate to the owner of any private sewer lateral whose lower lateral is replaced pursuant to this practice covering the replaced portion of the private sewer lateral.

2. By April 20, 2011, the City of Emeryville shall enact an ordinance which requires that each owner of a private sewer lateral show proof that the lower lateral meets the performance standards by obtaining (or already holding) a valid Compliance Certificate upon transfer of title of the structure, prior to obtaining a permit or other approval authorizing construction or significant modification of such structure at a cost in excess of $100,000, and prior to obtaining approval from EBMUD for a change in the size of the owner’s water service.
This ordinance shall be designed to extend the application of the Regional Ordinance to lower laterals and Compliance Certificates for lower laterals shall have the same duration as Compliance Certificates provided for in the Regional Ordinance.

52. Sub-Basin Flow Monitoring/I&I Assessment Plan

A. The City of Emeryville shall cooperate with EBMUD in the development of the Regional Flow Monitoring/Data Assessment Program described in Section V.A. of the EBMUD SO, and the Flow Modeling and Limits Report described in Section V.B. of the EBMUD SO.

B. On July 30, 2010, the City of Emeryville submitted, and EPA has reviewed and approved, a Sub-Basin Flow Monitoring/I&I Assessment Plan. The City shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved.

C. On July 30, 2010, the City of Emeryville submitted, and EPA has reviewed and approved, a report to EPA on the activities undertaken pursuant to the Sub-Basin Flow Monitoring/I&I Assessment Plan, which includes the following:

1. Classification of Sub-Basins as high, medium, or low priority with regard to the relative quantities of significant infiltration to the Collection System;
2. Classification of Sub-Basins as high, medium, or low priority with regard to the relative quantities of significant inflow to the Collection System;
3. Identification of any bottlenecks in the Collection System which lack sufficient capacity to convey sewage flows through the Collection System and to the EBMUD interceptor during wet weather; and
4. A plan for using these results to identify and target high priority areas for repair and rehabilitation work.

53. Inflow Identification and Reduction

A. On July 30, 2010, the City of Emeryville submitted, and EPA has reviewed and approved, an Inflow Identification and Reduction Plan that describes how the City will implement a program to identify and reduce sources of direct storm water inflow, including
roof leaders and drains directly connected to the Collection System, leaking manhole covers, and
cross connections with storm drains. The City shall take the actions required by the Plan, in
accordance with the schedules and requirements of the Plan as approved.

B. Beginning in 2012, as part of the Annual Report provided for in Section
XIII, the City of Emeryville shall submit the following information as it becomes available on
implementation of the Inflow Identification and Reduction Program:

1. Locations and results of inflow testing done the previous year
including the total number of illicit connections discovered;

2. Description of follow-up actions that were conducted including the
number of illicit connections which were disconnected;

3. Description of enforcement actions taken against any property
owner which did not comply with disconnection requirements;

4. Description of methods used to seal manhole covers in Collection
System areas prone to flooding, and list of locations at which this work was done; and

5. A schedule for locations to be tested in the next year.

54. SSO Response, Recordkeeping, Notification, & Reporting

A. On April 15, 2010, the City of Emeryville submitted, and EPA has
reviewed and approved, a Sanitary Sewer Overflow Response Plan that describes the following:
(1) emergency response and contingency procedures to address SSOs from its Collection
System; (2) recordkeeping procedures for maintaining SSO reports, including a procedure for
linking the SSOs to the MMS; (3) procedures for notifying members of the public who may be
impacted by the SSO; (4) procedures for reporting to and notifying appropriate regulatory
agencies. The City of Emeryville shall ensure that agency staff and responders are adequately
trained to perform the procedures outlined in the SSO response plan, and shall implement the
Plan in accordance with the procedures specified in the Plan, as approved. The City shall retain
appropriate records and evaluate on an annual basis agency staff's and responders' adherence to
the Plan as approved, and report findings of its evaluation in the Annual Report required in
Section XIII.
55. **Maintenance Management System (MMS)**

   A. On **July 30, 2010**, the City of Emeryville submitted, and EPA has reviewed and approved, a Plan for obtaining and implementing computerized sewer maintenance management systems capable of scheduling work assignments and tracking completion of sewer cleaning, maintenance, repairs, and SSOs ("MMS Plan"). The City shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved.

   B. By October 15, 2011, the City of Emeryville shall certify to EPA that the City’s MMS has been fully implemented, and has been linked to a Geographic Information System (GIS) map of the Collection Systems, which is linked to an inventory of sewer Collection System assets that includes the information on asset age, material, dimensions, and capacities, along with information on inspection history, condition ratings and sewers repaired, rehabilitated, or replaced.

56. **Sewer Pipe and Maintenance Hole Inspection**

   A. On **April 15, 2010**, the City of Emeryville submitted, and EPA reviewed and approved, a Sewer Pipe and Maintenance Hole Inspection Plan. The City shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved. The Plan may be submitted in lieu of the Routine Inspection provisions required by subparagraph 50.B.1 upon a determination by EPA that the Plan meets or exceeds the criteria specified in subparagraph 50.B.1.

   B. Beginning in 2011, as part of the Annual Report provided for in Section XIII, the City of Emeryville shall submit information to EPA summarizing inspection methods and findings of the sewer pipe and maintenance hole condition assessment conducted during the previous year and the estimated miles of sewer pipe and number of maintenance holes to be inspected during the current year, along with a description of how the findings are being used to prioritize rehabilitation projects. If EPA determines that the Sewer Pipe and Maintenance Hole Inspection Plan meets or exceeds the requirements of subparagraph 50.B.1 the reporting required under this subparagraph may be incorporated into the section of the Annual Report pertaining to implementation of the AMIP provided for in subparagraph 50.C.
57. **Annual SSO Reports.** Beginning in 2011, as part of the Annual Report provided for in Section XIII, the City of Emeryville shall submit a copy to EPA of the Annual Report of Sanitary Sewer Overflows required by the Regional Water Board ("Annual Overflow Report").

To the extent that the information is not included in the Annual Overflow Report, the City shall provide a listing of the number and location of any repeat SSOs, a list of any SSOs in areas in which the sewer pipes have been rehabilitated, and a description of measures that will be taken to help prevent these SSOs in the future.

**X. WORK — CITY OF OAKLAND**

58. **Maintain Current Program.** The City of Oakland shall implement the programs for controlling SSOs and reducing I&I set forth in its SSMP.

59. **Implement Improvements.** The City of Oakland shall implement any improvements to its current programs needed to meet the requirements set out below in this Section. To the extent that an existing program satisfies the requirements of this Section, the City of Oakland may submit a description of its program for review and approval by EPA pursuant to Section XIV.

60. **Asset Management Program**

   A. The City of Oakland shall participate and cooperate with EBMUD in the development of the EBMUD Template in accordance with the provisions of Section V.D., Paragraph 39 of the EBMUD SO. The City of Oakland and Baykeeper reserve the right to comment on the EBMUD Template, and/or to submit an Alternative Template to EBMUD, EPA and the Regional Water Board, before the end of the ninety-day comment period set forth in the EBMUD SO. Upon completion of the EBMUD Template, following review of it and any other Alternative Template(s), EPA may provide comments for use as guidance by the City as the basis for the Asset Management Implementation Plan ("AMIP").

   B. By July 15, 2012, the City shall submit to EPA for review and approval pursuant to Section XIV an AMIP that uses the EPA comments provided pursuant to subparagraph A above. The City may tailor the EPA comments, and may omit portions of the EPA comments that do not apply to the City. The AMIP shall be updated as necessary to
incorporate any revisions to the initial inspection and maintenance schedules, and to ensure that
repair, renovation and replacement projects continue to be adequately identified and planned
beyond the initial time frames specified in subparagraph 60.B.3. At a minimum, the AMIP shall
include a description of the City of Oakland’s programs for:

1. **Routine inspection of the Collection System** according to a
specified schedule, and that includes the following:
   a) Inspection methods to be used, including direct visual
      inspection and CCTV inspection, and whether CCTV equipment is owned, purchased, leased, or
      a combination;
   b) An inspection schedule, and protocol for determining the
      regular time interval on which repeat inspections will be performed; and
   c) A system for timely evaluation of inspection findings and
documentation of the assessed condition.

2. **Collection system maintenance protocols, including:**
   a) A schedule for routine cleaning of the City of Oakland’s
      Collection System using standardized responses developed by the City to typical local problems
      that cause blockages such as debris, grease and roots. The City shall develop its routine cleaning
      schedule after evaluating the cleaning needs of the Collection System;
   b) A list of locations where pipe blockages and SSOs have
      frequently occurred (hot spots), a hot spot cleaning schedule, and procedures for adjusting the
      hot spot cleaning schedule based on changing conditions;
   c) Preventive measures to address blockage of sewer pipes by
      roots, including a description of root control methods; locations where root control methods may
      be used within the Collection System; and a schedule for application of root control methods;
      and
   d) A plan for staffing the sewer system cleaning and root
      control programs, indicating whether staffing duties will be carried out by agency staff, by staff
      from other agencies, or by private contractor(s). To the extent that any sewer cleaning or root
control duties conducted under this program will be carried out by private contractor(s), the City
of Oakland shall retain on file and make available for inspection for a period of three years after
the completion of work a description of each contractor and a copy of each contract, or a
description of the procurement process.

e) A Quality Assurance and Quality Control Program
("QA/QC Program") to ensure proper sewer cleaning. The QA/QC Program shall include a plan
for inspecting the cleaning quality, which specifies a minimum percentage of cleaned pipe to be
inspected at regular intervals and a schedule for inspections, the procedures for conducting the
inspections, the time interval for any necessary re-cleaning, and criteria for increasing and
decreasing the frequency of inspection.

3. **Condition based repair and replacement of sewer pipe plan.**

This plan shall include elimination of known improper flow connections, according to a schedule
informed by the inspection results, and address both short-term (repairs of Acute Defects to
occur within one year of completion of inspection and assessment) and long term repair,
rehabilitation and replacement of sewer pipes. The plan shall include the following:

a) A schedule and 10 year financial plan for repair,
rehabilitation, and replacement of sewer pipes. This schedule shall identify pipe reaches
presently planned as priorities for rehabilitation or replacement over the next three years, with
the understanding that the identified priorities are likely to be further developed and revised
through the inspection and assessment process, and as a result of changed conditions. The City
shall develop its schedule for repair, rehabilitation and replacement of sewer pipes using
standardized responses developed by the City to observed defects, taking into account available
peak flow rate data;

b) Measures to control the inflow and infiltration as needed to
reduce flows in the Collection System and reduce the frequency of SSOs; and

c) The budget allocated for emergency repair and replacement
of sewer pipe, the length of sewer pipe which underwent emergency repair and replacement
during the previous year, and the cost thereof.
C. Beginning in 2013, as part of its Annual Report provided for in Section XIII, the City of Oakland shall submit information to EPA summarizing the City's progress in implementing each element of the AMIP, and must include any proposed revisions to the maintenance and construction schedules along with any accompanying changes to the financial plan. If any Acute Defect has not been addressed within one year of the inspection and assessment identifying it, the City shall explain what new information or changed circumstances warrant not addressing the Acute Defect.

61. Private Sewer Lateral Inspection and Repair or Replacement Program

A. Consistent with the requirements at Section V.C., Paragraph 29 of the EBMUD SO, EBMUD adopted a Regional Private Sewer Lateral Ordinance (the "Regional Ordinance") setting standards for the performance of sewer pipes that extend from privately-owned structures to the Satellites' Collection Systems ("private sewer laterals"). The Regional Ordinance requires that each owner of a private sewer lateral show proof that the lateral meets the performance standards by obtaining (or already holding) a valid Compliance Certificate upon transfer of title of the structure, prior to obtaining a permit or other approval authorizing construction or significant modification of such structure at a cost in excess of $100,000, and prior to obtaining approval from EBMUD for a change in the size of the owner's water service. The Regional Ordinance applies only to the portion of private sewer laterals that are on the property of the owner of the privately-owned structure (the "upper lateral"). Portions of the private sewer lateral connecting the upper lateral to the sewer main on public property, including public streets, (the "lower lateral") are not addressed by the Regional Ordinance. The City of Oakland has the option of submitting an application to EBMUD for a determination that the City has a private sewer lateral ordinance that is no less stringent than the Regional Ordinance ("No Less Stringent Application"), but has elected to be covered under the EBMUD Regional Ordinance.

B. On October 15, 2010, the City of Oakland submitted the following to EPA for review and comment (these documents do not require EPA approval):
1. A description of how the City of Oakland will cooperate with EBMUD in the implementation of its private sewer lateral program within its service area, including a description of the responsibilities that will be assigned to each City agency or department involved in the implementation of this program;

2. A statement that the City will include, as part of the application process for permits and approvals described in subparagraph 61.A, a requirement that the applicant submit a valid EBMUD Compliance Certificate; and

3. A copy of an agreement, if any, between the City and EBMUD regarding cooperation in the implementation of the private sewer lateral program, which may include a description of the City building permit process that requires permittees to submit compliance certificates prior to the City inspector's completion of the final inspection.

C. The City of Oakland shall provide to EBMUD the information required by and at the frequency determined necessary by EPA for implementation of the Regional Ordinance program. If the City implements a building permit process that requires permittees to submit Compliance Certificates before the City completes its final inspection of a building remodel project as the approval triggering the Compliance Certificate requirement in the EBMUD Ordinance, the City, to satisfy the requirements of this subparagraph, shall:

1. beginning January 31, 2012, before issuing a permit or other authorization for construction or significant modification of a structure at a cost in excess of $100,000, require every recipient of such a permit or authorization to submit information, on a postcard or other format chosen by the City, to the City of Oakland including, at a minimum, the following information: property parcel number, the name and phone number of the property owner, the name, address, phone number and contractor license number (if any) of the person issued the permit, the address of the building for which the permit is issued, whether a Compliance Certificate has been issued for the property;

2. submit to EBMUD, by copies of such postcards or other means chosen by the City, the information submitted to the City pursuant to subparagraph 1 in a timely manner, and also maintain records or copies of such postcards or other submittals sent to
1. EBMUD under this subsection, in a segregated notebook or electronic location for inspection by EPA or other regulating agency;

3. beginning July 1, 2012, submit to EBMUD, in either electronic or hard copy format as the City chooses, a monthly log of all remodel permits for jobs greater than $100,000 where a final inspection has been completed to finalize the project; and

4. maintain records available for inspection by EBMUD or Plaintiffs, beginning January 31, 2012, of all such permits or other authorization for construction or significant modification of a structure at a cost in excess of $100,000, as well as records of all the final inspections completed for such work. Upon request of EBMUD or Plaintiffs, the City shall verify whether any particular permittee had a final inspection conducted on their remodel project.

D. Lower Laterals

1. The City of Oakland shall continue its existing practice of, when replacing sewer mains, evaluating the condition of lower laterals connected to those sewer mains and replacing or requiring replacement of defective lower laterals. The City of Oakland may establish a process to notify homeowners and/or EBMUD regarding improvements it may make to lower laterals.

2. By August 19, 2011, the City of Oakland shall enact an ordinance which extends EBMUD’s Regional Ordinance to apply to lower sewer laterals. The owner of a lower sewer lateral (unless already holding a valid Compliance Certificate) shall be required to obtain a Compliance Certificate from EBMUD (a) prior to transferring title to the residential, commercial, or industrial structure, (b) prior to obtaining final inspection on any permit or other approval needed for the construction or significant modification of such structure at a cost in excess of $100,000, or (c) prior to obtaining approval from EBMUD for an increase or decrease in size of the owner’s water service. It is anticipated that, in January 2012 (after a city ordinance is passed as described above), EBMUD will extend the administration of the Regional Ordinance to lower laterals in the same way as upper laterals, under its Stipulated Order with the United...
States, and that EBMUD’s Compliance Certificates shall cover lower laterals as well as upper laterals.

62. **Sub-Basin Flow Monitoring/I&I Assessment Plan**

A. The City of Oakland shall cooperate with EBMUD in the development and implementation of the Regional Flow Monitoring/Data Assessment Program described in Section V.A. of the EBMUD SO, and the Flow Modeling and Limits Report described in Section V.B. of the EBMUD SO.

B. **On September 30, 2010,** the City of Oakland submitted, and EPA has reviewed and approved, a Sub-Basin Flow Monitoring/Data Assessment Plan. The City shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved.

C. By December 1, 2012, the City of Oakland shall submit a report to EPA for review and approval pursuant to Section XIV on the activities undertaken pursuant to the Sub-Basin Flow Monitoring/Data Assessment Plan. The report shall assess Sub-Basin flows and hydraulic capacity within the Sub-Basins. The assessments shall include the results of flow measurements, visual observations of flow levels and predictive flow modeling as needed to complete the report such that the report:

1. Identifies areas, sources and quantities of significant inflow to the sanitary sewer Collection System;

2. Identifies areas, sources, and quantities of significant infiltration to the Collection System;

3. Identifies any bottlenecks in the Collection System which lack sufficient capacity to convey sewage flows through the Collection System and to the EBMUD interceptor during wet weather; and

4. Provides a plan for using these results to identify and target high priority areas for repair and rehabilitation work.

D. If the work described in Subsections B and C of this Paragraph has been completed within the past ten years, the City may, by **September 30, 2010,** submit a summary of
63. **Inflow Identification and Reduction**
   
   **A.** On **September 30, 2010**, the City of Oakland submitted, and EPA has reviewed and approved, an Inflow Identification and Reduction Plan that describes how the City will implement a program to identify and reduce sources of direct storm water inflow, including roof leaders and drains directly connected to the Collection System, leaking manhole covers, and cross connections with storm drains. The City shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved.

   **B.** Beginning in 2012, as part of the Annual Report provided for in Section XIII, the City of Oakland shall submit the following information as it becomes available on implementation of the Inflow Identification and Reduction Program:
   
   1. Locations and results of inflow testing done the previous year including the total number of illicit connections discovered;
   
   2. Description of follow-up actions that were conducted including the number of illicit connections which were disconnected;
   
   3. Description of enforcement actions taken against any property owner which did not comply with disconnection requirements;
   
   4. Description of methods used to seal manhole covers in Collection System areas prone to flooding, and list of locations at which this work was done; and
   
   5. A schedule for locations to be tested in the next year.

64. **SSO Response, Recordkeeping, Notification and Reporting**
   
   **A.** On **March 1, 2010**, the City of Oakland submitted, and EPA has reviewed and approved, a Sanitary Sewer Overflow Response Plan that describes the following: (1) emergency response and contingency procedures to address SSOs from its Collection System; (2) recordkeeping procedures for maintaining SSO reports, including a procedure for linking the SSOs to the MMS; (3) procedures for notifying members of the public who may be impacted by the SSOs; and (4) procedures for reporting to and notifying appropriate regulatory agencies.
City of Oakland shall ensure that agency staff and responders are adequately trained to perform the procedures outlined in the SSO Response Plan, and shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved. The City shall retain appropriate records and evaluate on an annual basis agency staff's and responders' adherence to the Plan as approved, and report findings of its evaluation in the Annual Report required in Section XIII.

65. **Pump Station and Force Main Reliability**

   A. By July 15, 2012, the City of Oakland shall submit a plan to EPA for review and approval pursuant to Section XIV, including a schedule and financial plan, for completing the necessary repairs, renovations, and upgrades on each pump station and force main. The improvements shall be designed to ensure adequate capacity for peak weather flows, and to provide an automatic alarm system with SCADA communications and backup or redundant equipment (pumps and power supply) so that pump station operations can be restored in a timely manner in the event of electrical failure, mechanical failure, or power outage. The schedule and financial plan shall be sufficient to ensure completion of the upgrades by October 15, 2022.

   B. Beginning in 2013, as part of the Annual Report provided for in Section XIII, the City of Oakland shall submit information to EPA documenting pump station and force main renovations and upgrades during the previous year, and describing projects to be completed in the next year.

66. **Data Management – Maintenance Management System**

   A. By January 15, 2011, the City of Oakland shall submit to EPA for review and approval pursuant to Section XIV a plan for obtaining and implementing computerized sewer maintenance management systems (MMS) capable of scheduling work assignments and tracking completion of sewer cleaning, maintenance, repairs and SSOs. The City shall record information on Collection System inspections, condition ratings, and sewers repaired, rehabilitated, and replaced. The MMS shall have the capability to be used to generate reports summarizing SSOs and to identify hot spots.
B. By October 15, 2011, the City of Oakland shall certify to EPA that the City’s MMS is being fully implemented, and has been linked to a Geographic Information System (GIS) map of the Collection Systems, which is linked to an inventory of Collection System assets that includes information on asset age, material, dimensions and capacities, where available, along with information on inspection history, condition ratings and sewers repaired, rehabilitated, or replaced, where available.

67. Sewer Cleaning and Root Control Program

A. By July 15, 2011 the City of Oakland shall submit a plan to implement a Sewer Cleaning and Root Control Plan to ensure regular cleaning of sewer pipes. The Sewer Cleaning and Root Control Plan shall include a schedule for routine cleaning which ensures that the highest priority Collection System locations are cleaned at least once every 10 years, except that hot spot locations must be cleaned on a more frequent basis. The frequency of hot spot cleaning shall be based on a rationale, and supported by data. Records of pipe mileage cleaned shall be based on the unique length of each pipe section that was cleaned, and shall not include multiple passes through that same length of pipe. The Plan must be sufficient to eliminate or reduce blockage-related SSOs. EPA review of this Plan shall consider whether it meets or exceeds the requirements of subparagraph 60.B.2. If EPA determines that the Plan meets or exceeds the requirements of subparagraph 60.B.2, the Plan shall be deemed to satisfy the requirements of subparagraph 60.B.2. To the extent practical, EPA’s review of this Plan will take into consideration any EPA comments provided pursuant to subparagraph 60.A. with regard to these criteria so that the City has the opportunity to tailor this Plan to the pertinent provisions required to be included in the AMIP.

B. Beginning in 2012, as part of its Annual Report provided for in Section XIII, the City of Oakland shall document the activities conducted under its Sewer Cleaning and Root Control Program during the previous year, including miles of pipe cleaned as part of the routine and hot spot cleaning programs, and miles of pipe treated by each method for controlling roots. The City of Oakland shall include a description of the success of the Sewer Cleaning and Root Control Program at preventing blockages and SSOs as well as any changes to be made to
the Program to further reduce SSOs. If EPA determines that the Sewer Cleaning and Root
Control Plan meets or exceeds the requirements of subparagraph 60.B.2, the reporting required
under this subparagraph may be incorporated into the section of the Annual Report pertaining to
implementation of the AMIP provided for in subparagraph 60.C.

68. Sewer Pipe and Maintenance Hole Inspection

A. By July 15, 2011, the City of Oakland shall submit a Sewer Pipe and
Maintenance Hole Inspection Plan to EPA for review and approval pursuant to Section XIV for
periodic inspection and assessment of the condition of gravity sewers and maintenance holes
throughout the City’s Collection System. The Plan shall be sufficient to evaluate the condition of
pipes and maintenance holes following blockage related SSOs, identify pipes and maintenance
holes in need of emergency repair, and shall contain a schedule which initiates the inspection of
the high priority Collection System locations at a rate of no less than 10 percent per year. The
universe of high priority locations and the rate of inspection shall be based on a rationale, and
supported by data. EPA’s review of this Plan shall consider whether it meets or exceeds the
requirements of subparagraph 60.B.1. If EPA determines that this Plan meets or exceeds the
requirements of subparagraph 60.B.1, the Plan shall be deemed to satisfy the requirements of
subparagraph 60.B.1. To the extent practical, EPA’s review of this Plan will take into
consideration any EPA comments provided pursuant to subparagraph 60.A. with regard to these
criteria so that the City has the opportunity to tailor this Plan to the pertinent provisions required
to be included in the AMIP.

B. Beginning in 2012, as part of the Annual Report provided for in Section
XIII, the City of Oakland shall submit information to EPA summarizing inspection methods and
findings of the sewer pipe and maintenance hole condition assessment conducted during the
previous year and the estimated miles of sewer pipe and number of maintenance holes to be
inspected during the current year, along with a description of how the findings are being used to
prioritize rehabilitation projects. If EPA determines that the Sewer Pipe and Maintenance Hole
Inspection Program meets or exceeds the requirements of subparagraph 60.B.1, the reporting
required under this subparagraph may be incorporated into the section of the Annual Report
pertaining to implementation of the AMIP provided for in subparagraph 60.C.

69. **Sewer Repair, Rehabilitation and Replacement** Beginning in 2011, as part of the
Annual Report provided for in Section XIII, the City of Oakland shall submit information to
EPA documenting sewer repair, rehabilitation, and/or replacement activities completed in the
previous year; describing projects to be completed in the coming year; and discussing the
reductions in flows and/or SSOs that have been achieved. Beginning in 2013, the reporting
required under this Paragraph may be incorporated into the section of the Annual Report
pertaining to implementation of the Asset Management Plan provided for in subparagraph 60.C.

70. **Annual SSO Reports.** Beginning in 2011, as part of the Annual Report submitted
pursuant to Section XIII, the City of Oakland shall submit a copy to EPA of the Annual Report
of Sanitary Sewer Overflows required by the Regional Water Board (“Annual Overflow
Report”). To the extent that the information is not included in the Annual Overflow Report, the
City shall provide a listing of the number and location of any repeat SSOs, a list of SSOs in any
areas in which the sewer pipes have been rehabilitated, and a description of measures that will be
taken to help prevent these SSOs in the future.

**XI. WORK — CITY OF PIEDMONT**

71. **Maintain Current Program.** The City of Piedmont shall implement the programs
for controlling SSOs and reducing I&I set forth in its SSMP.

72. **Implement Improvements.** The City of Piedmont shall implement any
improvements to its current programs needed to meet the requirements set out below in this
Section. To the extent that an existing program satisfies the requirements of this Section, the
City of Piedmont may submit a description of its program for review and approval by EPA
pursuant to Section XIV.

73. **Asset Management Program**

A. The City of Piedmont shall participate and cooperate with EBMUD in the
development of the EBMUD Template in accordance with the provisions of Section V.D.,
Paragraph 39 of the EBMUD SO. The City of Piedmont and Baykeeper reserve the right to
comment on the EBMUD Template, and/or to submit an Alternative Template to EBMUD, EPA
and the Regional Water Board, before the end of the ninety-day comment period set forth in the
EBMUD SO. Upon completion of the EBMUD Template, following review of it and any other
Alternative Template(s), EPA may provide comments for use as guidance by the City as the
basis for the Asset Management Implementation Plan ("AMIP").

B. By July 15, 2012, the City shall submit to EPA for review and approval
pursuant to Section XIV an AMIP that uses the EPA comments provided pursuant to
subparagraph A above. The City may tailor the EPA comments, and may omit portions of the
EPA comments that do not apply to the City. The AMIP shall be updated as necessary to
incorporate any revisions to the initial inspection and maintenance schedules, and to ensure that
repair, renovation and replacement projects continue to be adequately identified and planned
beyond the initial time frames specified in subparagraph 72.B.3. At a minimum, the AMIP shall
include a description of the City of Piedmont’s programs for:

1. **Routine inspection of the Collection System** according to a
   specified schedule, and that includes the following:
   a) Inspection methods to be used, including direct visual
      inspection and CCTV inspection, and whether CCTV equipment is owned, purchased, leased, or
      a combination;
   b) An inspection schedule, and protocol for determining the
      regular time interval on which repeat inspections will be performed; and
   c) A system for timely evaluation of inspection findings and
documentation of the assessed condition.

2. **Collection system maintenance protocols, including:**
   a) A schedule for routine cleaning of the City of Piedmont’s
      Collection System using standardized responses developed by the City to typical local problems
      that cause blockages such as debris, grease and roots. The City shall develop its routine cleaning
      schedule after evaluating the cleaning needs of the Collection System;
   b) A list of locations where pipe blockages and SSOs have
frequently occurred (hot spots), a hot spot cleaning schedule, and procedures for adjusting the
hot spot cleaning schedule based on changing conditions;

c) Preventive measures to address blockage of sewer pipes by roots, including a description of root control methods; locations where root control methods may be used within the Collection System; and a schedule for application of root control methods;

and
d) A plan for staffing the sewer system cleaning and root control programs, indicating whether staffing duties will be carried out by agency staff, by staff from other agencies, or by private contractor(s). To the extent that any sewer cleaning or root control duties conducted under this program will be carried out by private contractor(s), the City of Piedmont shall retain on file and make available for inspection for a period of three years after the completion of work a description of each contractor and a copy of each contract, or a description of the procurement process.

e) A Quality Assurance and Quality Control Program (“QA/QC Program”) to ensure proper sewer cleaning. The QA/QC Program shall include a plan for inspecting the cleaning quality, which specifies a minimum percentage of cleaned pipe to be inspected at regular intervals and a schedule for inspections, the procedures for conducting the inspections, the time interval for any necessary re-cleaning, and criteria for increasing and decreasing the frequency of inspection.

3. Condition based repair and replacement of sewer pipe plan.

This plan shall include elimination of known improper flow connections, according to a schedule informed by the inspection results, and address both short-term (repairs of Acute Defects to occur within one year of completion of inspection and assessment) and long term repair, rehabilitation and replacement of sewer pipes. The plan shall include the following:

a) A schedule and 10 year financial plan for repair, rehabilitation, and replacement of sewer pipes. This schedule shall identify pipe reaches presently planned as priorities for rehabilitation or replacement over the next three years, with the understanding that the identified priorities are likely to be further developed and revised
through the inspection and assessment process, and as a result of changed conditions. The City shall develop its schedule for repair, rehabilitation and replacement of sewer pipes using standardized responses developed by the City to observed defects, taking into account available peak flow rate data;

b) Measures to control the inflow and infiltration as needed to reduce flows in the Collection System and reduce the frequency of SSOs; and
c) The budget allocated for emergency repair and replacement of sewer pipe, the length of sewer pipe which underwent emergency repair and replacement during the previous year, and the cost thereof.

C. Beginning in 2013, as part of its Annual Report provided for in Section XIII, the City of Piedmont shall submit information to EPA summarizing the City’s progress in implementing each element of the AMIP, and must include any proposed revisions to the maintenance and construction schedules along with any accompanying changes to the financial plan. If any Acute Defect has not been addressed within one year of the inspection and assessment identifying it, the City shall explain what new information or changed circumstances warrant not addressing the Acute Defect.

74. Private Sewer Lateral Inspection and Repair or Replacement Program

A. Consistent with the requirements at Section V.C., Paragraph 29 of the EBMUD SO, EBMUD adopted a Regional Private Sewer Lateral Ordinance (the “Regional Ordinance”) setting standards for the performance of sewer pipes that extend from privately-owned structures to the Satellites’ Collection Systems (“private sewer laterals”). The Regional Ordinance requires that each owner of a private sewer lateral show proof that the lateral meets the performance standards by obtaining (or already holding) a valid Compliance Certificate upon transfer of title of the structure, prior to obtaining a permit or other approval authorizing construction or significant modification of such structure at a cost in excess of $100,000, and prior to obtaining approval from EBMUD for a change in the size of the owner’s water service. The Regional Ordinance applies only to the portion of private sewer laterals that are on the property of the owner of the privately-owned structure (the “upper lateral”). Portions of the
private sewer lateral connecting the upper lateral to the sewer main on public property, including public streets, (the "lower lateral") are not addressed by the Regional Ordinance. The City of Piedmont has the option of submitting an application to EBMUD for a determination that the City has a private sewer lateral ordinance that is no less stringent than the Regional Ordinance ("No Less Stringent Application"), but has elected to be covered under the EBMUD Regional Ordinance.

B. On October 15, 2010, the City of Piedmont submitted the following to EPA for review and comment (these documents do not require EPA approval):

1. A description of how the City of Piedmont will cooperate with EBMUD in the implementation of its private sewer lateral program within its service area, including a description of the responsibilities that will be assigned to each City agency or department involved in the implementation of this program;

2. A statement that the City will include, as part of the application process for permits and approvals described in subparagraph 74.A, a requirement that the applicant submit a valid EBMUD Compliance Certificate; and

3. A copy of an agreement, if any, between the City and EBMUD regarding cooperation in the implementation of the private sewer lateral program, which may include a description of the City building permit process that requires permittees to submit compliance certificates prior to the City inspector's completion of the final inspection.

C. The City of Piedmont shall provide to EBMUD the information required by and at the frequency determined necessary by EPA for implementation of the Regional Ordinance program. If the City implements a building permit process that requires permittees to submit compliance certificates before being issued certificates of occupancy, the City, to satisfy the requirements of this subparagraph, shall annually document, in spreadsheet format, the building permits issued, the certificates of occupancy issued, and whether a compliance certificate was submitted prior to issuance of the certificate of occupancy.

D. Lower Laterals
1. The City of Piedmont shall continue its existing practice of, when replacing sewer mains, evaluating the condition of lower laterals connected to those sewer mains and replacing or requiring replacement of defective lower laterals. The City of Piedmont may issue a Compliance Certificate to the owner of any private sewer lateral whose lower lateral is replaced pursuant to this practice covering the replaced portion of the private sewer lateral.

2. By February 25, 2011, the City of Piedmont shall enact an ordinance which requires that each owner of a private sewer lateral show proof that the lower lateral meets the performance standards by obtaining (or already holding) a valid Compliance Certificate upon transfer of title of the structure, prior to obtaining a permit or other approval authorizing construction or significant modification of such structure at a cost in excess of $100,000, and prior to obtaining approval from EBMUD for a change in the size of the owner's water service. This ordinance shall be designed to extend the application of the Regional Ordinance to lower laterals and Compliance Certificates for lower laterals shall have the same duration as Compliance Certificates provided for in the Regional Ordinance.

75. Sub-Basin Flow Monitoring/I&I Assessment Plan

A. The City of Piedmont shall cooperate with EBMUD in the development of the Regional Flow Monitoring/Data Assessment Program described in Section V.A. of the EBMUD SO, and the Flow Modeling and Limits Report described in Section V.B. of the EBMUD SO.

B. On August 31, 2010, the City of Piedmont submitted, and EPA has reviewed and approved, a Sub-Basin Flow Monitoring/I&I Assessment Plan. The City shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved.

C. By December 1, 2012, the City of Piedmont shall submit a report to EPA for review and approval pursuant to Section XIV on the activities undertaken pursuant to the Sub-Basin Flow Monitoring/I&I Assessment Plan to provide the following:

   1. Classification of Sub-Basins as high, medium, or low priority with regard to the relative quantities of significant infiltration to the Collection System;
2. Classification of Sub-Basins as high, medium, or low priority with regard to the relative quantities of significant inflow to the Collection System;

3. Identification of any bottlenecks in the Collection System which lack sufficient capacity to convey sewage flows through the Collection System and to the EBMUD interceptor during wet weather; and

4. A plan for using these results to identify and target high priority areas for repair and rehabilitation work.

76. **Inflow Identification and Reduction**

   A. On **August 31, 2010**, the City of Piedmont submitted, and EPA has reviewed and approved, an Inflow Identification and Reduction Plan that describes how the City will implement a program to identify and reduce sources of direct storm water inflow, including roof leaders and drains directly connected to the Collection System, leaking manhole covers, and cross connections with storm drains. The City shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved.

   B. Beginning in 2012, as part of the Annual Report provided for in Section XIII, the City of Piedmont shall submit the following information as it becomes available on implementation of the Inflow Identification and Reduction Program:

      1. Locations and results of inflow testing done the previous year including the total number of illicit connections discovered;

      2. Description of follow-up actions that were conducted including the number of illicit connections which were disconnected;

      3. Description of enforcement actions taken against any property owner which did not comply with disconnection requirements;

      4. Description of methods used to seal manhole covers in Collection System areas prone to flooding, and list of locations at which this work was done; and

      5. A schedule for locations to be tested in the next year.

77. **Computerized Maintenance Management System (MMS)**
A. On August 31, 2010, the City of Piedmont submitted, and EPA has reviewed and approved, a Plan for improving its computerized sewer maintenance management system so that it is capable of scheduling work assignments and tracking completion of sewer cleaning, maintenance, repairs, and SSOs ("MMS Plan"). The City shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved.

B. By October 15, 2011, the City of Piedmont shall certify to EPA that the City’s MMS is being fully implemented and has been linked to a Geographic Information System (GIS) map of the Collection Systems, which is linked to an inventory of sewer Collection System assets that includes the information on asset age, material, dimensions, and capacities, along with information on inspection history, condition ratings and sewers repaired, rehabilitated, or replaced.

78. Sewer Repair, Rehabilitation and Replacement. Beginning in 2011, as part of the Annual Report provided for in Section XIII, the City of Piedmont shall submit information to EPA documenting sewer repair, rehabilitation, or replacement activities completed in the previous year; describing projects to be completed in the next year; and discussing the reductions in flows and/or SSOs that have been achieved. Beginning in 2013, the reporting required under this Paragraph may be incorporated into the section of the Annual Report pertaining to implementation of the Asset Management Plan provided for in subparagraph 69.C.

79. Annual Overflow Reports. Beginning in 2010, as part of the Annual Report provided for in Section XIII, the City of Piedmont shall submit a copy to EPA of the Annual Report of Sanitary Sewer Overflows ("Annual Overflow Report") required by the Regional Water Board. To the extent that the information is not included in the Annual Overflow Report, the City of Piedmont shall provide a listing of the number and location(s) of repeat SSOs, a list of any SSOs in areas in which the sewer pipes have been rehabilitated, and a description of measures that will be taken to help prevent these SSOs in the future. The City shall also review the Annual Spill Report to determine whether the utilization of a vactor truck could have helped to mitigate the impact of the SSOs and include a summary of the review and provide a summary of the evaluation results.
XII. WORK – STEGE SANITARY DISTRICT

80. **Maintain Current Program.** The Stege Sanitary District shall implement the programs for controlling SSOs and reducing I&I set forth in its SSMP.

81. **Implement Improvements.** The Stege Sanitary District shall implement any improvements to its current programs needed to meet the requirements set out below in this Section. To the extent that an existing program satisfies the requirements of this Section, the Stege Sanitary District may submit a description of its program for review and approval by EPA pursuant to Section XIV.

82. **Asset Management Program**

A. The Stege Sanitary District shall participate and cooperate with EBMUD in the development of the EBMUD Template in accordance with the provisions of Section V.D., Paragraph 39 of the EBMUD SO. The District and Baykeeper reserve the right to comment on the EBMUD Template, and/or to submit an Alternative Template to EBMUD, EPA and the Regional Water Board, before the end of the ninety-day comment period set forth in the EBMUD SO. Upon completion of the EBMUD Template, following review of it and any other Alternative Template(s), EPA may provide comments for use as guidance by the District as the basis for the Asset Management Implementation Plan (“AMIP”).

B. By July 15, 2012, the District shall submit to EPA for review and approval pursuant to Section XIV an AMIP that uses the EPA comments provided pursuant to subparagraph A above. The District may tailor the EPA comments, and may omit portions of the EPA comments that do not apply to the District. The AMIP shall be updated as necessary to incorporate any revisions to the initial inspection and maintenance schedules, and to ensure that repair, renovation and replacement projects continue to be adequately identified and planned beyond the initial time frames specified in subparagraph 81.B.3. At a minimum, the AMIP shall include a description of the District’s programs for:

1. **Routine inspection of the Collection System** according to a specified schedule, and that includes the following:

   a) Inspection methods to be used, including direct visual
inspection and CCTV inspection, and whether CCTV equipment is owned, purchased, leased, or a combination;

b) An inspection schedule, and protocol for determining the regular time interval on which repeat inspections will be performed; and

c) A system for timely evaluation of inspection findings and documentation of the assessed condition.

2. **Collection system maintenance protocols, including:**

   a) A schedule for routine cleaning of the Stege Sanitary District’s Collection System using standardized responses developed by the District to typical local problems that cause blockages such as debris, grease and roots. The District shall develop its routine cleaning schedule after evaluating the cleaning needs of the Collection System;

   b) A list of locations where pipe blockages and SSOs have frequently occurred (hot spots), a hot spot cleaning schedule, and procedures for adjusting the hot spot cleaning schedule based on changing conditions;

   c) Preventive measures to address blockage of sewer pipes by roots, including a description of root control methods; locations where root control methods may be used within the Collection System; and a schedule for application of root control methods; and

   d) A plan for staffing the sewer system cleaning and root control programs, indicating whether staffing duties will be carried out by agency staff, by staff from other agencies, or by private contractor(s). To the extent that any sewer cleaning or root control duties conducted under this program will be carried out by private contractor(s), the Stege Sanitary District shall retain on file and make available for inspection for a period of three years after the completion of work a description of each contractor and a copy of each contract, or a description of the procurement process.

   e) A Quality Assurance and Quality Control Program ("QA/QC Program") to ensure proper sewer cleaning. The QA/QC Program shall include a plan for inspecting the cleaning quality, which specifies a minimum percentage of cleaned pipe to be
inspected at regular intervals and a schedule for inspections, the procedures for conducting the
inspections, the time interval for any necessary re-cleaning, and criteria for increasing and
decreasing the frequency of inspection.

3. **Condition based repair and replacement of sewer pipe plan.**

This plan shall include elimination of known improper flow connections, according to a schedule
informed by the inspection results, and address both short-term (repairs of Acute Defects to
occur within one year of completion of inspection and assessment) and long term repair,
rehabilitation and replacement of sewer pipes. The plan shall include the following:

   a) A schedule and 10 year financial plan for repair,
   rehabilitation, and replacement of sewer pipes. This schedule shall identify pipe reaches
   presently planned as priorities for rehabilitation or replacement over the next three years, with
   the understanding that the identified priorities are likely to be further developed and revised
   through the inspection and assessment process, and as a result of changed conditions. The
   District shall develop its schedule for repair, rehabilitation and replacement of sewer pipes using
   standardized responses developed by the District to observed defects, taking into account
   available peak flow rate data;

   b) Measures to control the inflow and infiltration as needed to
   reduce flows in the Collection System, and to reduce the frequency of SSOs; and

   c) The budget allocated for emergency repair and replacement
   of sewer pipe, the length of sewer pipe which underwent emergency repair and replacement
during the previous year, and the cost thereof.

C. **Beginning in 2013, as part of its Annual Report provided for in Section**

XIII, the Stege Sanitary District shall submit information to EPA summarizing the District’s
progress in implementing each element of the AMIP, and must include any proposed revisions to
the maintenance and construction schedules along with any accompanying changes to the
financial plan. If any Acute Defect has not been addressed within one year of the inspection and
assessment identifying it, the District shall explain what new information or changed
circumstances warrant not addressing the Acute Defect.
83. **Private Sewer Lateral Inspection and Repair or Replacement Program**

A. Consistent with the requirements at Section V.C., Paragraph 29 of the EBMUD SO, EBMUD adopted a Regional Private Sewer Lateral Ordinance (the “Regional Ordinance”) setting standards for the performance of sewer pipes that extend from privately-owned structures to the Satellites’ Collection Systems (“private sewer laterals”). The Regional Ordinance requires that each owner of a private sewer lateral show proof that the lateral meets the performance standards by obtaining (or already holding) a valid Compliance Certificate upon transfer of title of the structure, prior to obtaining a permit or other approval authorizing construction or significant modification of such structure at a cost in excess of $100,000, and prior to obtaining approval from EBMUD for a change in the size of the owner’s water service. The Regional Ordinance applies only to the portion of private sewer laterals that are on the property of the owner of the privately-owned structure (the “upper lateral”). Portions of the private sewer lateral connecting the upper lateral to the sewer main on public property, including public streets, (the “lower lateral”) are not addressed by the Regional Ordinance. The District has the option of submitting an application to EBMUD for a determination that the District has a private sewer lateral ordinance that is no less stringent than the Regional Ordinance (“No Less Stringent Application”), but has elected to be covered by the EBMUD Regional Ordinance.

B. On **October 15, 2010**, the Stege Sanitary District submitted the following to EPA for review and comment (these documents do not require EPA approval):

1. Procedures for cooperating with EBMUD in the implementation of its private sewer lateral program within the District’s service area, including a description of the responsibilities that will be assigned to each District department involved in the implementation of this program;

2. A statement that the District will coordinate with the entities who are responsible for issuing the permits and approvals described above in subparagraph 83.A to the District’s customers to insure that such permits and approvals are issued only upon presentation by the District’s customers of a valid EBMUD Compliance Certificate; and
3. A copy of an agreement, if any, between the District and EBMUD regarding cooperation in the implementation of the private sewer lateral program, which may include a description of the building permit processes that require the District’s customers to submit compliance certificates prior to the City inspector’s completion of the final inspection.

C. The District shall provide to EBMUD the information required by and at the frequency determined necessary by EPA for implementation of the Regional Ordinance program.

D. **Lower Laterals.** The District’s Ordinances provide that the property owner is the owner of the lower lateral and has full responsibility for its maintenance. By June 20, 2011, the District shall enact an ordinance which extends EBMUD’s Regional Ordinance to apply to lower sewer laterals. Unless the property owner already has a valid Compliance Certificate, the property owner shall be required to obtain a Compliance Certificate from EBMUD (a) prior to transferring title to the residential, commercial, or industrial structure, (b) prior to obtaining any permit or other approval needed for the construction or significant modification of such structure at a cost in excess of $100,000, or (c) prior to obtaining approval from EBMUD for an increase or decrease in size of the owner’s water service. It is anticipated that, in January 2012 (after a District ordinance is passed as described above), EBMUD will extend the administration of the Regional Ordinance to lower laterals in the same way as upper laterals, under its Stipulated Order with the United States, and that EBMUD’s Compliance Certificates shall cover lower laterals as well as upper laterals.

84. **Sub-Basin Flow Monitoring/I&I Assessment Plan**

A. The Stege Sanitary District shall cooperate with EBMUD in the development of the Regional Flow Monitoring/Data Assessment Program described in Section V.A. of the EBMUD SO, and the Flow Modeling and Limits Report described in Section V.B. of the EBMUD SO.

B. On **July 15, 2010,** the Stege Sanitary District submitted, and EPA has reviewed and approved, a Sub-Basin Flow Monitoring/I&I Assessment Plan. The District shall
take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved.

C. By December 1, 2012, the Stege Sanitary District shall submit a report to EPA for review and approval pursuant to Section XIV on the activities undertaken pursuant to the Sub-Basin Flow Monitoring/I&I Assessment Plan to provide the following:

1. Classification of Sub-Basins as high, medium, or low priority with regard to the relative quantities of significant infiltration to the Collection System;
2. Classification of Sub-Basins as high, medium, or low priority with regard to the relative quantities of significant inflow to the Collection System;
3. Identification of any bottlenecks in the Collection System which lack sufficient capacity to convey sewage flows through the Collection System and to the EBMUD interceptor during wet weather; and
4. A plan for using these results to identify and target high priority areas for repair and rehabilitation work.

85. Inflow Identification and Reduction

A. On July 15, 2010, the Stege Sanitary District submitted, and EPA has reviewed and approved, an Inflow Identification and Reduction Plan that describes how the Stege Sanitary District will implement a program to identify and reduce sources of direct storm water inflow, including roof leaders and drains directly connected to the Collection System, leaking manhole covers, and cross connections with storm drains. The District shall take the actions required by the Plan, in accordance with the schedules and requirements of the Plan as approved.

B. Beginning in 2012, as part of the Annual Report provided for in Section XIII, the Stege Sanitary District shall submit the following information as it becomes available on implementation of the Inflow Identification and Reduction Program:

1. Locations and results of inflow testing done the previous year including the total number of illicit connections discovered;
2. Description of follow-up actions that were conducted, including the number of illicit connections which were disconnected;

3. Description of enforcement actions taken against any property owner who did not comply with disconnection requirements;

4. Description of methods used to seal manhole covers in Collection System areas prone to flooding, and list of locations at which this work was done; and

5. A schedule for locations to be tested in the next year.

86. **Documentation of SSO Response Procedures**

   A. **On April 15, 2010,** Stege Sanitary District submitted, and EPA has reviewed and approved, written procedures for the following:

   1. Procedures to notify those who respond to SSOs during normal business hours and after business hours. The responders shall have a response goal of 60 minutes.

   2. Procedures to estimate SSO volume that include more than one estimation method to be used for different SSO scenarios.

   3. Procedures to determine the SSO start time. The start time shall be no later than the time at which the initial report of the SSO is made.

   These procedures are enforceable under this Stipulated Order as if set forth herein.

   B. Stege Sanitary District shall ensure that agency staff and responders are adequately trained to perform the SSO response procedures, and shall maintain records of training. The District shall retain appropriate records and evaluate on an annual basis agency staff's and responders' adherence to the Plan as approved, and report findings of its evaluation in the Annual Report required in Section XIII.

87. **Annual SSO Reports.** Beginning in 2011, as part of the Annual Report provided for in Section XIII, the Stege Sanitary District shall submit a copy to EPA of the Annual Report of Sanitary Sewer Overflows ("Annual Overflow Report") required by the Regional Water Board. To the extent that the information is not included in the Annual Overflow Report, the Stege Sanitary District shall provide a listing of the number and location(s) of repeat SSOs, a list