

Settlement Agreement Status Report
July 15, 2010
NRDC v. Johnson,
U.S. District Court, Central District of California
No. CV06-4843 PSG (JTLx)

Pursuant to Paragraph 15 of the Settlement Agreement in the above-referenced matter, the United States Environmental Protection Agency (“EPA” or “the Agency”) provides this status report. It includes a description of the actions taken by EPA with respect to its responsibilities under the Settlement Agreement during the preceding six months (January 1, 2010 to June 30, 2010) and a description of the actions EPA intends to take with respect to its responsibilities under the Settlement Agreement during the following six months (July 1, 2010 to December 31, 2010).

Settlement Agreement (SA) ¶ 4(a) Conduct epidemiological studies at POTW-impacted marine beaches in Fairhope, Alabama and Goddard, Rhode Island (P1, P2).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA continued to conduct quality assurance/quality control (QA/QC) of the epidemiological data (i.e., water quality data and interview responses) and continued to prepare a manuscript appropriate for a peer reviewed publication. EPA’s plans to submit a manuscript appropriate for publication were delayed to allow for further analyses.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will continue QA/QC and analysis of the epidemiological data (i.e., water quality data and interview responses). EPA also will submit a manuscript appropriate for a peer reviewed publication. EPA will complete the study by December 15, 2010.

SA ¶ 4(b) Provide technical assistance in support of an epidemiological study at a beach in Avalon, CA considered to be impacted by untreated human fecal contamination (P3).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA participated in teleconference calls with SCCWRP and UC Berkeley investigators. EPA provided technical assistance regarding interpretation of qPCR results and discussion of epidemiological data analysis to support consistency between the EPA and SCCWRP epidemiological analyses.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will continue providing technical assistance in support of the Avalon epidemiological study, if requested, regarding data analysis and interpretation.

SA ¶ 4(c) Conduct QMRA (based on measurement of pathogenic organisms and indicators) to estimate illness at a freshwater beach impacted by agricultural animal sources of fecal contamination (location to be determined) (clarifying P4).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA conducted a second rain simulation experiment using manure spiked with surrogate pathogens. EPA analyzed the results from this second simulation and the first simulation, along with results from two laboratory experiments using manure spiked with surrogate pathogens. EPA did not collect stream water samples at streams impacted by runoff, because during the study period there were no rain events that produced runoff. EPA refined the problem formulation and animal-specific inputs and assumptions in the analytical-based QMRA models based on available data. EPA incorporated, as appropriate, comments from the Science Advisory Board (SAB) in revising the Microbial Risk Assessment framework.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will conduct a third rain simulation experiment and analyze the data. EPA plans to collect stream water samples during three natural rain events and to start and finish data analyses of these samples taken at streams impacted by runoff. If natural rain events at levels sufficient to produce runoff do not occur, EPA may not be able to collect three sets of samples during this time period. EPA expects to finalize the formulation, assumptions and animal-specific inputs (from the first two rain simulations and the laboratory spiking experiments as well as other available data sources) for the QMRA. EPA will conduct the QMRA and produce a risk characterization for an agricultural animal impacted freshwater site. EPA will complete the study by December 15, 2010.

SA ¶ 4(d) Study various parameters that affect performance of qPCR signal for enterococci and compare with other methods and pathogens in treated wastewater mixed with ambient waters (enterococci, *E. coli*, *Cryptosporidium*, and enterovirus) (P8).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA finished the Phase 2 laboratory and data analyses, and began and finished the Phase 3 sample collection and laboratory and data analyses. EPA performed QA analysis of the entire database and began statistical analysis of the combined data from all three sampling periods. EPA began to draft the final report for external review. EPA has decided to publish an externally peer reviewed EPA report rather than submit an article to a peer reviewed journal.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will finish the statistical analyses. EPA will prepare, externally peer review, and complete a final report for this project. EPA will complete the study by December 15, 2010.

SA ¶ 4(e) Design and evaluate a monitoring approach that will characterize the quality of beach waters that takes into account the spatial and temporal variability associated with water sampling (P12).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA concluded designing and evaluating a monitoring approach that will characterize the quality of beach waters that takes into account the spatial and temporal variability associated with water sampling. EPA began revising the draft study report based on internal peer review comments.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will finalize the study report. EPA will complete the study by December 15, 2010.

SA ¶ 4 (f) Evaluate multiple indicator/method combinations to develop quantifiable relationships (P15).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA continued to identify, collect and collate fecal indicator bacteria related data. EPA also determined the most appropriate groupings and statistical analyses to evaluate data for relationships with respect to health effects and indicator combinations and began conducting the analyses.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will complete the statistical analyses for use in developing quantifiable relationships among indicator/method combinations. EPA will prepare a report, conduct peer review, address comments and finalize the report. EPA will complete this study by December 15, 2010.

SA ¶4(g) Study the effects of sampling holding time, sample storage, and preservation on sample integrity for future use (P16).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA finished the holding time qPCR statistical data analyses for the fresh (24hr and 48hr), 6-month frozen, and 12-month frozen filter samples (fresh and marine waters). Holding time assessments were done with *Enterococcus*, *Bacteroidales* and *E.coli* qPCR assays. EPA started and finished the assessment (statistical data analysis) of the stability of the archived filters from all beach epi studies (2003-2007 fresh and marine water). The statistical data analysis of the stability of the archived filters was performed for *Enterococcus* for the Great Lakes beaches and for marine beaches, and for *Bacteroidales* for marine beaches.

Actions Planned by EPA from July 1, 2010 to December 31, 2010

For the holding time studies, EPA will perform laboratory and data analyses of 24-month frozen filter samples for both fresh and marine waters. EPA will prepare, externally peer review, and complete a final report for these studies. EPA will complete this study by December 15, 2010.

SA ¶4(h) (1) Develop, refine, validate, and publish one or more new ambient test methods (P17).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA completed the single laboratory validation studies of the Enterococcus qPCR and Bacteroidales qPCR methods for ambient water testing. EPA updated the methods based on the results of the validation study. The methods were published (Method A: Enterococci EPA-821-R-10-004 and Method B: Bacteroidales EPA-822-R-10-003) on the EPA web site at: <http://www.epa.gov/waterscience/methods/method/biological/>

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will prepare and submit a completion notice for this study.

¶4(h) (2) Develop, refine, validate, and publish one or more new wastewater test method(s) provided the results of P8 and P18 indicate that a new wastewater test method is necessary (P17).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

Pursuant to ¶ 5(a) of the Settlement Agreement, EPA is hereby notifying the other parties of EPA's determination not to complete the study described in paragraph 4(h)(2) because EPA has determined, based on the preliminary results of the studies in SA ¶¶ 4 (d) and 4(i) that a new or revised wastewater test method is not necessary. The preliminary results from the study in 4(d) indicate that the Enterococci qPCR method measures DNA levels in both wastewater and receiving ambient waters. The preliminary results from the study in 4(i) indicate that existing culture methods approved for wastewater may be sufficient. Therefore, based on the results available at this time, a new wastewater method is not needed.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

No further actions are planned with regard to this obligation.

SA ¶4(i) Evaluate the suitability of individual combinations of indicators and methods for different CWA programs (P18)

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA continued to evaluate the suitability of individual combinations of indicators and methods for different CWA programs. EPA began preparation of a draft report.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will finalize the study report. EPA will complete the study by December 15, 2010.

SA ¶4(j) Re-analyze archived NEEAR samples using molecular methods for other indicators, including at least *E. coli*, provided the samples have not degraded during storage (depending on the outcome of P16 and the nature of indicator/method) (P22).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA finished laboratory analysis of archived frozen marine filters using the same general fecal and human indicator panel (including *E.coli*) used for re-analysis of the NEEAR

freshwater archived samples. EPA has concluded that it cannot complete this study because the samples have degraded during storage (based on the results of the study in Settlement Agreement paragraph 4(g) (i.e., the “P16 study”). Freshwater and marine samples analyzed as part of the P16 study with Enterococcus, Bacteroidales and E.coli qPCR assays after 6 month and 1 year of frozen storage indicated statistically significant changes in stability for Bacteroidales and E.coli (but not Enterococcus). Also, archived 2003-2007 freshwater and marine NEARR samples, re-analyzed as part of the P16 study with Enterococcus qPCR assay, degraded (i.e., changed in a statistically significant manner). Therefore, pursuant to paragraph 5(a) of the Settlement Agreement, EPA is hereby notifying the other parties that EPA will not complete re-analysis of the archived (frozen) NEARR samples for the study in SA paragraph 4(j). Although EPA has no reason to expect the P16 results to change, the data and analyses are still subject to external peer review and final publication.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

No further actions are planned with regard to this obligation.

SA ¶4(k) Pilot test Virtual Beach model for beach notification and advisories/closures (P23).

SA ¶4(l) Refine and validate existing water quality models for freshwater beach notification and advisories/closures (P24).

SA ¶4(m) Refine and validate other existing water quality models for marine beach notification and advisories/closures (P25).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA continued to refine and validate Virtual Beach 2.0 for freshwater beaches and to develop a report on predictive modeling of water quality at freshwater beaches. EPA continued to refine and validate Virtual Beach 2.0 for marine beaches. EPA finished model validation studies using 2008 qPCR indicator data and data obtained with automated equipment at marine beaches. EPA continued working on the draft report on the results of the pilot testing of Virtual Beach 1.0 and the refinement and validation of Virtual Beach 2.0, including the Virtual Beach Model Building Tool and Beach Advisor for freshwater and marine beaches.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA plans to finish drafting, externally peer review, and complete the report for these studies. EPA will complete these studies by December 15, 2010.

SA ¶4(n) Develop technical protocol for site-specific application of predictive models to be used in making beach advisory decisions (P26).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA completed categorization of the essential elements of the predictive modeling process, using results from literature reviews, informal state surveys and research conducted under SA ¶4(k) and (m) (P23-P25). EPA completed the draft report and began an internal review of the document.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will finalize the report. EPA will complete the study by December 15, 2010.

SA ¶4(o) Compare EPA's 1986 Bacteria Criteria recommendations to NEEAR studies to better understand the relationship between fecal contamination and illness in these data sets, provided EPA can obtain the raw data used to develop the 1986 Criteria (P27).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

No further action will be taken with respect to this obligation (see EPA's July 15, 2009 status report).

Actions Planned By EPA from July 1, 2010 to December 31, 2010

No further actions are planned with regard to this obligation.

SA ¶4(p) Evaluate applicability of NEEAR Great Lakes data to inland waters (P28).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA evaluated monitoring schemes specific to flowing fresh waters and continued developing a QMRA tool. Additionally, EPA began preparing a draft summary report to support the evaluation of the applicability of NEEAR Great Lakes data to inland waters.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will finalize the summary report and complete the study by December 15, 2010.

SA ¶4(q) Conduct statistical analysis of children data from epidemiological studies (P29).

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA continued the statistical analysis of children's data from the marine epidemiological studies at beaches in Biloxi, MS, Fairhope, AL, Goddard, RI, Surfside Beach, SC, and Boquerón Beach, PR. EPA's plans to submit manuscripts appropriate for publication were delayed to allow for further analyses.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will continue statistical analysis of the children's data from the marine epidemiological studies and plans to prepare three peer reviewed documents covering respectively, (1) the Great Lakes studies, (2) the marine studies in MS, AL, and RI, and (3) the 2009 studies at Surfside, SC, and Boquerón Beach, PR. EPA will complete this study by December 15, 2010.

SA ¶ 6 When it completes a study described in Paragraph 4 of this Agreement, EPA will provide written notice to the other Parties, including a summary of the study and findings, and a statement that the study has been completed. This Paragraph does not apply to the study described in Paragraph 4(b), which is not being conducted by EPA.

Actions Taken By EPA from January 1, 2010 to December 31, 2010

The studies that EPA must complete in Paragraph 4 of the Settlement Agreement are ongoing and substantial progress is being made. However, EPA has not yet completed these studies and therefore did not provide written notice of completion to the parties pursuant to paragraph 6 of the Settlement Agreement.

Actions Planned By EPA from January 1, 2010 to June 30, 2010

EPA will complete all of the remaining studies described in Paragraph 4 that EPA is required to complete (*i.e.*, not ¶¶ 4(b), 4(h)(2), 4(j), and 4(o)) and provide written notification of completion of the studies by December 15, 2010.

SA ¶ 7 If an epidemiological study proposed by the Southern California Coastal Water Research Project (SCCWRP) for Doheny Beach is initiated by SCCWRP no later than December 2009, EPA will provide technical assistance on study design and analysis.

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA participated in teleconference calls with SCCWRP and UC Berkeley investigators. EPA provided technical assistance regarding interpretation of qPCR results and discussion of epidemiological data analysis to support consistency between the EPA and SCCWRP epidemiological analyses.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will continue providing technical assistance in support of the Doheny Beach epidemiological study, if requested, regarding data analysis and interpretation.

SA ¶ 8 For any epidemiological studies to be completed by EPA under Paragraph 4 of this Agreement and Paragraph 5 of the Consent Decree, EPA will use a suite of indicators and methods that EPA determines to be the most promising for the development of new or revised recreational water quality criteria. In making this determination, EPA will consider the indicators and methods that were used in previously conducted epidemiological studies and new indicators and methods that EPA determines to be promising for the development and implementation of new or revised recreational water quality criteria.

Actions Taken By EPA from January 1, 2010 to June 30, 2010

No actions were taken on this obligation during this reporting period.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

No further action will be taken with respect to this obligation.

SA ¶ 9(a) Continue to conduct research currently underway to identify genetic sequences that could form the basis of chicken and seagull specific fecal source assays

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA began the evaluation of the four avian assays during this period. EPA collected additional molecular data to further validate the existing gull and chicken assays. EPA identified additional novel sequence targets that could be used to develop additional host-specific assays.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will continue to evaluate selected chicken and gull assays for their potential to uniquely identify specific avian sources of fecal contamination against feces from targeted and non-targeted hosts. EPA will continue to generate and analyze molecular data to develop additional gull-specific assays.

SA ¶ 9 (b) If EPA determines that it can develop chicken and seagull specific fecal source assays, EPA will evaluate the assays for specificity and sensitivity using a reference collection of fecal samples, as well as environmental water samples with known sources of fecal contamination.

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA further evaluated seagull and chicken assays using a collection of fecal samples from targeted and non-targeted hosts, as well as environmental water samples with known sources of fecal contamination. EPA performed sequence analyses of avian fecal microbial communities to confirm the presence of molecular markers and to develop additional assays as needed.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will conduct studies to determine the presence of host markers and sensitivity of avian-specific PCR assays in environmental waters. EPA will conduct studies to determine the detection limit of avian-specific PCR assays against fecal and water DNA extracts.

SA ¶ 9(c) No later than July 15, 2011, EPA will notify the other Parties in writing whether EPA was able to develop the assays and evaluate the assays as described in subparagraph 9(a). If EPA is able to complete the evaluation by July 15, 2011, the notification will include a brief summary of such evaluation.

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA did not take any actions with respect to this obligation during this time period.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA does not plan to take any actions with respect to this obligation during this time period.

SA ¶ 10(a) Subject to any statutory or regulatory limitations restricting the distribution of confidential business information or private information (e.g., names, addresses), EPA will provide access to data from the studies identified in Paragraph 4 of the Settlement Agreement and paragraph 5 of the Consent Decree after EPA has conducted any quality assurance/quality control review and, as deemed necessary by EPA, internal and external peer review, including addressing the comments of such review. EPA may determine to provide access to the data by

notifying the Parties in writing that the data are available for their review and its location, or by other method of transmission.

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA continued preparation of a database and a codebook for interpreting the variable names and code data for the Fairhope, AL, Goddard, RI and Biloxi, MS marine epidemiological studies as well as preparations for Surfside Beach, SC and Boquerón Beach, PR epidemiological studies. EPA began developing data access plans for each study described in SA ¶4.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will complete and make available a database and a codebook for interpreting the variable names and code data for the Fairhope, AL, Goddard, RI, and Biloxi, MS, marine epidemiological studies as well as for Surfside Beach, SC, and Boquerón Beach, PR epidemiological studies. EPA will implement the data access plan for each project described in SA ¶4. EPA will provide access to data for all studies identified in ¶ 4 of the Settlement Agreement and ¶ 5 of the Consent Decree completed by December 15, 2010.

SA ¶ 10(b) Subject to any statutory or regulatory limitations restricting the distribution of confidential business information or private information (e.g., names, addresses), EPA will provide access to data from the epidemiological studies previously conducted by EPA in support of the new or revised recreational water quality criteria no later than June 15, 2009. EPA may determine to provide access to the data by notifying the Parties in writing that the data are available for their review and its location, or by other method of transmission.

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA did not take any action with respect to this obligation during the reporting period.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA plans no further action for the time period with respect to this obligation.

SA ¶ 11 EPA will convene a stakeholder workshop or other mechanism for stakeholder input during 2009, 2010, and 2011. These workshops will provide an opportunity for Plaintiff, Intervenor, and other interested stakeholders to provide input to EPA and/or bring issues to EPA associated with the development of the new or revised criteria to be issued by October 2012. EPA expects these issues to include issues related to implementation of the new or revised water quality criteria EPA will publish in 2012. The focus of the 2009 and 2010 workshops will be for EPA to update stakeholders on the progress EPA has made in completing studies and framing the issues associated with the development of the new or revised criteria and for Plaintiffs, Intervenor, and other interested stakeholders to comment on EPA's update. The focus of the 2011 workshop will be to provide an opportunity for Plaintiff, Intervenor, and other interested stakeholder to comment on EPA's

evaluation, synthesis, summarization and statistical analysis of the studies and development of options for the overall structure and content of the recreational water quality criteria that EPA will publish in 2012.

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA began planning for conducting a Webinar for the 2010 Stakeholder Workshop. EPA will provide an update on the progress of research activities and on framing the issues associated with the development of the new or revised criteria for the 2010 meeting. EPA will also provide Plaintiffs, Intervenors, and other interested parties an opportunity to comment on EPA's updates during the Webinar.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will announce and begin planning for a face-to-face stakeholder meeting to be held in 2011.

SA ¶ 12 EPA will validate and publish a rapid test method for the new or revised criteria by October 15, 2012. Validation of a rapid test method will involve conducting an inter-laboratory study, the purpose of which is to characterize method performance (including recovery and precision) for a rapid method in reference matrices and ambient recreational waters (fresh and marine) in multiple laboratories and to develop quantitative quality control acceptance criteria. Publication does not include promulgation of an EPA-approved test method in the Code of Federal Regulations.

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA completed the design phase of the study and began the conduct of the multiple laboratory validation study for Enterococcus qPCR and Bacteroidales qPCR methods in marine waters. EPA began planning for a similar study in freshwater.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will complete the multi-lab validation study to characterize method performance and develop quantitative quality control acceptance criteria for Enterococcus qPCR and Bacteroides qPCR in marine waters, and will initiate the study in freshwater.

SA ¶ 13 EPA will review epidemiological studies of swimming-related health risks due to fecal contamination that are completed by entities other than EPA, including, but not limited to, studies of runoff-impacted beaches and beaches impacted by avian sources, if the results are made known by EPA by December 2010. EPA will consider any relevant study findings in developing recreational water quality criteria. EPA will either incorporate the relevant study findings into the recreational water quality criteria or explain, in its notice of proposed new or revised water quality criteria and solicitation of public comment, the reasons why such study findings are not appropriate for incorporation into the recreation water quality criteria.

Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA continued to identify and evaluate epidemiological studies of swimming related health risks due to fecal contamination completed by entities other than EPA (e.g., Fleming et al. 2008, Colford et al. 2005, Fleisher et al.1998, Kay et al.1994, Corbett et al. 1993). EPA completed a draft comparison and evaluation of epidemiology study designs used in recreational waters.

Actions Taken By EPA from July 1, 2010 to December 31, 2010

EPA plans to review final results from additional epidemiology studies conducted by Epibathe and SCCWRP if they become available before December 2010. In addition, EPA will continue to monitor the progress of other epidemiological studies currently being conducted so they may be evaluated if completed by December 2010.

SA ¶ 14 No later than December 15, 2011, EPA will convene an Experts Scientific Workshop involving both EPA scientists and external scientists for the primary purpose of obtaining input on what future science and research might be conducted to further improve the understanding of potential human health risks from exposure to fecal contamination from avian wildlife and other wildlife in coastal recreational waters. If the experts at the Experts Workshop identify one or more studies that might be conducted to further improve the understanding of the potential health risks from exposure to fecal contamination from avian wildlife or other wildlife, EPA shall evaluate whether the studies should be performed as part of the Agency's review (between 2012 and 2017) of the criteria that EPA will publish in 2012, and EPA shall advise the parties to this Agreement of the results of EPA's evaluation no later than December 15, 2012.

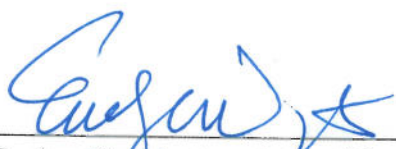
Actions Taken By EPA from January 1, 2010 to June 30, 2010

EPA began planning the 2011 Expert Scientific Workshop.

Actions Planned By EPA from July 1, 2010 to December 31, 2010

EPA will decide on meeting format and location, develop a draft agenda, and begin preparing meeting invitation and other materials.

The undersigned, Evelyn Washington and Charles I. Noss are, respectively, the Acting Director, Standards and Health Protection Division, Office of Science and Technology and National Program Director for Water Quality, Office of Research and Development. The Office of Science and Technology in EPA's Office of Water and the Office of Research and Development have primary responsibility for discharging EPA's duties under the Settlement Agreement. This report reflects our best current information concerning the actions taken by EPA with respect to its responsibilities under the Settlement Agreement during the preceding six months (January 1, 2010 – June 30, 2010) and a description of the actions EPA intends to take with respect to its responsibilities under the Settlement Agreement during the following six months (July 1, 2010 – December 31, 2010).



Evelyn Washington, Acting Director
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14 July 2010.

Date



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National Program Director for Water Quality
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13 July, 2010

Date