Response to Stipulation #17 of the Request for Information and Compliance Order by Consent, Docket Number CWA-10-2009-0083

By August 31, 2009, Respondent shall submit a plan to United States Environmental Protection Agency (EPA) and Washington State Department of Ecology (Ecology) to observe and document Combined Sewer Overflow (CSO) discharges at 5 outfalls annually for the presence of solids or floatable material in the discharge annually. The plan shall include a means to begin the observation within 4 hours of rainfall termination. The plan will include the process by which the presence or absence of solids or floatable material shall be observed and documented. Respondent shall repeat this process with 5 different outfalls each year until 15 outfalls have been observed and documented. Respondent shall submit a report annually on the findings by April 30th of each year.

King County will implement a plan to make additional observations at CSO sites for floatables release after overflows. Three teams of employees have been formed to complete the observations and an overflow notification system has been developed.

King County recommends an alternative time frame for observations which considers the typical pattern of rainfall and overflow experienced by our system. The observation window will start when the overflow has begun, and end four hours after the overflow ends.

- Rainfall and overflows often do not end at the same time. An overflow may continue beyond local rainfall as the upstream system drains; light rainfall may continue when overflows have ceased.
- Any floatables will be most likely observed near the start of an overflow (as any remaining street trash is washed from the street) until the overflow stops (before river currents and tides wash floatables out of the area)

For the purposes of this activity the end of an overflow will be defined as when 30 minutes without overflow have passed. (Note: This is different from the Ecology definition used for frequency counting of 24 hours of no overflow.)

The list of CSOs, with any reasons why they are not recommended observation sites, is attached. King County recommends that observations be made at the nine CSOs marked ** on the attached list instead of 15. Out of the county's 38 CSOs, these nine uncontrolled CSOs have discharges that can be distinguished from any shared stormwater discharges, are in observable locations, or are not already in control project predesign (which will include additional floatables controls).

A form for the observations that includes a photo documenting non-overflow conditions for comparison to overflow conditions has been developed and attached.

King County recommends that the annual report be submitted at the same time as the Annual CSO Report to Ecology, due July 31st each year.

The following table summarizes the county's Plan.

SUMMARY TABLE SUMMARY OF RESPONSE TO REQUEST FOR INFORMATION #18	
Request for Information	**Action**
King County will implement a floatables observation plan including the following elements and actions:	Implementation will occur from July 2009 to April 2012. Reference photos will be taken of the area of overflow influence during non-overflow periods of time, summer 2009.
	An observation form has been developed to document the overflow conditions, photos and observations (attached).
	Teams will make observations during daylight scheduled work hours. At least three CSO sites will be observed each year, for a total of 9 *.
	A photo will be taken during each overflow observation for comparison to the reference photo.
	Observations will be made from the start of the overflow to within four hours of the end of the overflow (defined as a 30 minute non-overflow period) **. Up to three observations will be made for each CSO.
	Reports will be submitted to EPA and Ecology by July 31st of each year through 2012 ***. Progress will be reviewed summer 2010, and any needed modification to the plan will me made.

Exhibit: Site Selection Rationale

Bold type is selected sites, *italics indicates candidate sites that are not ideal*

003 Ballard Siphon Regulator - stormdrain
004 11th Avenue NW Overflow
006 Magnolia Overflow - control project in predesign
007 Canal Street Overflow - controlled
008 3rd Avenue W Regulator
009 Dexter Avenue Regulator - controlled
011 East Pine Street P.S. Emergency Overflow - controlled
012 Belvoir P.S. Emergency Overflow - controlled
013 Martin Luther King Way Trunkline Overflow -controlled
014 Montlake Regulator
015 University Regulator
018 Matthews Park P.S. Emergency Overflow - controlled
027 Denny Way Regulator - controlled
028 King Street Regulator
029 Kingdome Regulator - stormdrain
030 Lander Street Regulator - stormdrain
031 Hanford #1 Overflow - stormdrain, upstream City CSOs
032 Hanford Regulator #2 - under pier, not directly observable
033 Rainier Avenue P.S. Emergency Overflow - controlled
034 E. Duwamish River Siphon Overflow/Duwamish P. S. Emergency Overflow - controlled
035 Duwamish River Siphon - W. overflow - controlled
036 Chelan Avenue Regulator
037 Harbor Avenue Regulator - controlled, stormdrain, creek, upstream City CSOs
038 Terminal 115 Overflow - stormdrain
039 Michigan Regulator
040 8th Avenue South Regulator - controlled
041 Brandon Street Regulator
042 W. Michigan Regulator
043 E. Marginal PS Emergency Overflow- controlled, stormdrain
044 Norfolk Street Regulator - controlled
045 Henderson Street Pump Station Emergency Overflow- controlled, stormdrain
048a North Beach P.S. Emergency Overflow - wet well discharge to outfall, control project in predesign;
048b North Beach P.S. Emergency Overflow primary discharge - inlet, drains to stormdrain - control project in predesign
049 30th Ave. N.E. P.S. Emergency Overflow controlled
O53 53rd Ave P.S. Emergency Overflow controlled
054 63rd St. S.W. PS Emergency Overflow - controlled
055 S.W. Alaska St Overflow - controlled, stormdrain
056 Murray St PS Emergency Overflow - control project in predesign
057 Barton St PS Emergency Overflow - control project in predesign

Exhibit: Example Solids and Floatable Observation Form

Part I:

CSO Site: _____

Observer Name _____

Date: _____ Time of Observation: _____

Item	Baseline Count	Current Delta More, Same, Less)
Fecal Material		
Tissue paper		
Diaper	1	0 Less
Condoms/Plastic Hygiene items		
Cloth/Clothing		
Aluminum cans	3	1 Less
Cups/Food Containers	1	1 Same
Plastic bags		
Plastic or Glass Bottles		
Cigarette Butts		
Syringes		
Other:		

Pop Cans (3)
Baseline
Current (1)

Disposable Diaper (1)
Baseline

Food Wrapper (1)
Baseline
Current (1)

Part 2: To be Completed by Planning After Observations

Rain gauge: _____

Rainfall Start Date/Time: _____ Rainfall End Date/Time _____

Total Rainfall Recorded in Storm: _____ inches Duration _____hrs

Overflow Start Date/Time: _____ Overflow End Date/Time _____

Total Overflow Volume: _____ gallons Overflow Duration _____ hrs

Tidal Conditions: Ebb Neap Hrs. Since Slack _____ hrs