

Minimum Submittal Requirements For Hydromodification Management Studies

June 1, 2011

Report Contents: The report may be a stand-alone report, an appendix of the SWMP, or a section of the drainage study.

Preliminary Design	
	Project description
	Vicinity map
	Hydromodification management description
	Identify the software, including version and release date, that was used to perform the continuous simulation modeling or version of BMP Sizing Calculator
	Proposed maintenance entity for hydromodification management proposed mitigation measures
	<p>Discussion of geotechnical conditions at the site prepared by an appropriately licensed professional. The discussion shall be appropriate to the level of design. For preliminary design, the following geotechnical input for Hydromodification Management Studies shall be included:</p> <ul style="list-style-type: none"> • Description of site soils • Discussion of the feasibility of infiltration at the site • Recommendation of areas where on-site infiltration may be feasible, considering expected depth to groundwater, potential for lateral migration, and proximity of existing or proposed slopes, structures, roadways, wells, or other sensitive features • Preliminary infiltration rates for areas where on-site infiltration may be feasible
	Description of how the drainage analysis meets the requirements of the Final Hydromodification Management Plan (HMP), dated March 2011, available at: www.projectcleanwater.org/html/wg_susmp.html .
	Pre-project and post-project HMP exhibits at a legible scale, shall include drainage area delineated with area annotated and point of compliance (POC) locations. The post-project HMP exhibit shall include facility locations. Topography shall be included on these exhibits.
	Tabular summary of pre-project and post-project condition drainage subbasin areas and pervious/impervious land parameters along with supporting backup exhibits (e.g., soil, land use, and slope) overlaid with HMP boundaries.
	Geomorphic assessment, if performed.
	Description and a tabular summary of proposed mitigation measures
	Drawdown calculations for proposed mitigation measures and a discussion within the report. A vector control plan shall be included if any of the proposed mitigation measures drawdown time exceeds 96 hours.
	CD or DVD containing rainfall data*, continuous simulation model executable input files and output, and external processing files when applicable (e.g., external flow frequency calculations)
	*rainfall data can be downloaded from: www.projectcleanwater.org/html/wg_susmp.html .

Final Design	
	Project description
	Vicinity map
	Hydromodification management description
	Identify the software, including version and release date, that was used to perform the continuous simulation modeling or version of BMP Sizing Calculator
	Proposed maintenance entity for hydromodification management proposed mitigation measures
	<p>Discussion of geotechnical conditions at the site prepared by an appropriately licensed professional. The discussion shall be appropriate to the level of design. For final design, the following geotechnical input for Hydromodification Management Studies shall be included in addition to all requirements for Preliminary Design :</p> <p>When infiltration is proposed as part of hydromodification management features, provide:</p> <ul style="list-style-type: none"> • Depth to groundwater at each location where infiltration is proposed • Design infiltration rates and justification of the rates for each location where infiltration is proposed <p>When infiltration is not proposed, provide:</p> <ul style="list-style-type: none"> • Explanation of site conditions that preclude infiltration • Recommendations for subdrains and/or liners and/or other design elements to be incorporated in the design of the hydromodification management features
	Description of how the drainage analysis meets the requirements of the Final Hydromodification Management Plan (HMP), dated March 2011, available at: www.projectcleanwater.org/html/wg_susmp.html .
	Pre-project and post-project HMP exhibits at a legible scale, shall include drainage area delineated with area annotated and point of compliance (POC) locations. The post-project HMP exhibit shall include facility locations. Topography shall be included on these exhibits.
	Tabular summary of pre-project and post-project condition drainage subbasin areas and pervious/impervious land parameters along with supporting backup exhibits (e.g., soil, land use, and slope) overlaid with HMP boundaries.
	Geomorphic assessment, if performed.
	Description and a tabular summary of proposed mitigation measures
	Drawdown calculations for proposed mitigation measures and a discussion within the report. A vector control plan shall be included if any of the proposed mitigation measures drawdown time exceeds 96 hours.
	<p>CD or DVD containing rainfall data*, continuous simulation model executable input files and output, and external processing files when applicable (e.g., external flow frequency calculations)</p> <p>*rainfall data can be downloaded from: www.projectcleanwater.org/html/wg_susmp.html.</p>
	Final design submittals to include construction drawings, design details, all pertinent dimensions/elevations and calculations to demonstrate that the configuration of the final proposed mitigation measures are the same or equivalent to those modeled (e.g., volume, orifice sizing, etc.).