Clark County Environmental Services

2013-2018 NPDES Stormwater Permit
TECHNICAL ADVISORY COMMITTEE #7

Wednesday, March 5, 2014
3:00 – 5:00 p.m.
Public Service Center, 6th Floor Training Room, 1300 Franklin St.

Attendees:	~~Don Benton,~~ Ron Wierenga, Rod Swanson, Jane Tesner Kleiner, ~~Fereidoon Safdari, Chris Clifford~~	Clark County - DES
	Ali Safayi, John Davis	Clark County – Public Works
	~~Gordy Euler~~	Clark County - Planning
	~~Jan Bazala, Jim Muir~~, Bryan Mattson	Clark County – Comm. Dev.
	Eric Golemo	SGA Engineering
	Andrew Gunther	PLS Engineering
	Jim Carlson	Clean Water Comm.
	John Meier	AKS Engineering
	Peter Tuck	Olson Engineering
	~~Jon Girod~~	Quail Homes
	~~Troy Johns~~	Urban NW Homes
	Lance Lehto	Columbia West
	~~Alex Zimmerman~~	Creative Courses
	~~Robin Krause~~	CRWD
	Annette Griffy	City of Vancouver
	Tim Kraft (consultant for manual update)	OTAK

Agenda Topics:

3:00	**1. Welcome**	Clark County staff
3:05	**2. Feedback from last meeting – any follow-up**	All
3:15	**3. Policy Questions** • **Stormwater facility ownership** • **Fencing at facilities**	Ron Wierenga
3:15	**3. Design Manual Update Project** • **Book 1 compilation update** • **Review Chapters 3 – first review draft & 4 – revised review draft**	Tim and all
4:50	**5. Next steps** • **Public Outreach process –** starts in April 2014 • **Next meeting** - TBD	Jane Tesner Kleiner

NOTES:

Welcome and Introductions

Feedback from last meeting – follow up – County staff have received the scenarios from Eric G. per discussion at the last meeting.

Policy questions:

- **Fencing of SW facilities –** mainly discussed in Chapter 5 (some in Chapter 6). On private property a hold-harmless agreement is submitted, reviewed by the PA's office and recorded. For public facilities, various requirements are allowed.
    - Make sure there are no fence requirements for underground facilities, such as vaults, as they are not necessary
    - Unless there is a problem with the existing language, is there a need to change?
    - From a maintenance and operational standpoint, limiting access minimizes potential for illegal dumping and safety issues.
    - There may be some public concerns with the aesthetics living near facilities (a tall fence) or attractive nuisance for children.
    - It may be of interest to ensure there is flexibility to allow site specific design to meet safety, liability and aesthetics.
    - If integrated into a green space, greenway or park space there may be some opportunities to modify needs to allow a more suitable design.
    - Volume three in the DOE manual allows for the flexibility, page 3-24, in the detention pond section (based on walls and steep slopes). Need to look at language concerning water depths.
    - More flexibility in types of fencing that is used that match the "look" of the development to minimize the need to get a variance. There is interest to still meet basic quality standards for durability, such as the Building Code.
    - Is there any need to consider how we are moving towards "green infrastructure" that looks to wildlife movement through these facilities, pedestrian connections in walkable communities, etc?
    - Language can be updated to address safety and liability. Staff will prepare some draft updates for review and consideration of the policy makers.
    - Staff involved in facility maintenance strongly prefer fences and gates that minimize potential access and damage.
    - Fences need to be made of durable materials such as rust-proof metal and not wood or plastic.

- **Stormwater Facility Ownership –**
    - The BOCC is considering changing policy to no longer accept stormwater facilities in subdivisions into public ownership.
    - Many private facilities handle runoff from the public roads within the private development.
    - City of Vancouver will accept facilities as long as there is a recognizable entity that has capacity to maintain facilities.
    - In Camas, all facilities are required to be private, but they are considering switching to public facilities.
    - Cowlitz County has had issues related to HOAs that no longer have members or have dissolved.
    - All facilities in the public right-of-way (such as bioretention or rain gardens) would go to county ownership.
    - The state road system either needs to stay in a state or county-owned facility.
    - We would need to strengthen language in the ownership (i.e. HOA formation) to ensure compliance.
    - There is a cost to regulating private facilities versus maintaining public facilities.
    - The county inventory has required millions of dollars to fix and retrofit to ensure compliance and there are on-going O & M requirements.
    - TAC members may expect to hear some push back from their clients on the requirements that all facilities be private (i.e. the need to create a HOA, etc.).
    - Our NPDES municipal stormwater permit requires the county annually to inspect all facilities, public and private document defects, and ensure maintenance is completed in specified time intervals.
    - One tool to continue to allow public ownership could be a system development charge up-front to cover the costs of repairs.
    - To continue to accept public ownership, one option would be to raise the Clean Water Fee to continue to cover the growing number of facilities in the inventory.

- If there are funds available in the Clean Water fund, could there be an option to provide "mini-grants" to help private facility owners keep their system in compliance?
- Need to look at the various levels of maintenance. There may be some levels that the homeowners would help with (limited weeding, etc.) versus the long-term repairs (20-year soil replacement, etc.)

Chapter 3 – On-site Stormwater Management

- The DOE manual has overlap and redundancies so the Clark County manual will attempt to articulate the technical language more clearly. The goal of Book 1 is to determine and select your BMPs and complete the site plan and then Book 2 addresses the design technical information for individual BMPs.
- It may be helpful to have general definitions up front to clarify the difference between bioretention and rain gardens (need to find language on page 82).
- The DOE manual contains different standards for distance between bottom of the facility and groundwater for rain gardens (1 foot) and bioretention (3 feet). Standards are different, so help guide the user as early as possible in the chapter to the engineered vs. non-engineered options.
- There is concern that frequency of geotechnical testing is too high, too burdensome. The language may assume that testing at every residential lot is required…if it is a 150 lot development, the costs then make the project unfeasible. Becomes a policy level question to ensure that the requirement is equivalent to the DOE manual. Perhaps develop a minimum need, while allowing flexibility for reasonable testing number to cover risks.
- The language that allows the geotechnical professional to reduce the number of required tests based on professional judgment should also include criteria for consistency of soils on the site.
- Page 82, 83, 85 - correction factor language may need to be adjusted (call it 0.5) and eliminate the variability. The DOE manual has different language therefore it may need to clarify (i.e. Appendix 3-C-06 volume 3 (in the middle) and Volume 5 may have other language as well). 0.5 tends to be universally acceptable and would add consistency. Volume 3 page 105-106. Given the diversity of sites in Clark County, there is a need to cover risks (i.e. east county property that has one gravelly soil vs. other sites that may have four soil types within one project area).
- The City of Vancouver uses the DOE language (refers to the ASCE paper). DOE states that the soils maps are too coarse and not reliable enough to determine soils that are actually on site, therefore you need soil testing. On sites that meet minimum requirements 1-5, there is a need to reduce testing needs to lower costs while mitigating risks. A qualified professional can visually assess a soil in a soil pit to determine that soils match the soil data (SCS), especially for known soil types that will not infiltrate. On page 81, the test dates in 3.3.3 differ from DOE manual and may challenge the projects that are smaller such as a single-family residential (look at timing of testing). What is the DOE rationale for every 5,000 feet (page 84)? Otak will look at the third bullet on this page.
- There is a need to provide clarity on the ability of the geotech to specify the uniformity of soils on site, fore example using a minimum number of infiltration tests and the digging test pits to observe soil variability.
- We have not had feedback from DOE on the use of "should" versus "shall" guidance in the manual.

Chapter 4 – Infiltration

- We have received the comments from the Geotechnical subcommittee that need to be included in the manual.
- Site characterization and site suitability in Volume 3 was confusing so the language has been adjusted.
- The manual's downspout setback edits looks much better.
- Will there be any section cross-referencing between the CCSWM and the DOE manual? No, there will be some references, but not a reference table.
- Page 117 (calculate the Hydraulic Gradient) – asking clarification from civil engineers on the use of the formula. Some TAC members use the ASCE paper formula. Engineers use the exact number given by the geotech engineer. This adds a factor of safety. Needs to be reviewed for further consideration and applicability.

Next Steps – Schedule

- Manual development of Review Draft
- Schedule
- Upcoming public comment period (April) and BOCC work session (May)
- Review graphics and figures for use in the manual
- Schedule another meeting for first week of May

End of summary