

# Meeting Minutes

Advisory Technical Panel – Updating Infiltration and Inflow Control Program

Location: MWRD LASMA Visitor Center

Date: March 20, 2013 1:00pm to 4:30pm

Attendees: See attached Sign-in Sheet

- A. Ms. Maureen Durkin, Supervising Civil Engineer, MWRD, welcomed the ATP Members and Mr. Chris Skehan, local representative of ADS Environmental Services (ADS) introduced the Distinguished Guest Speaker.
- B. Mr. Patrick Stevens, ADS Environmental Services, gave a slide presentation regarding Observations from Rainfall Dependant Infiltration/Inflow Reduction Projects.
  1. Ms. Durkin asked if agencies' I/I reduction programs fell short, did they recognize the problems and correct them by changing the approach under a new program. Mr. Stevens stated that some agencies started their programs correctly. Other agencies that had failed programs secured additional money and then they were able to implement a program that produced better results. Mr. Stevens stated that typically agencies don't do I/I reduction until there is a consent decree. The consent decree is strict on what has to be done and what the penalties are which requires an agency to obtain good flow data. He gave several examples of agencies' programs and problems they encountered. He has observed that agencies implement a successful program on the third go around.
  2. Mr. Sean Dorsey, Mount Prospect, noted that Mr. Stevens' presentation mentioned that the trigger for an I/I removal program is if flow monitoring results show 5% of the rainfall entering into the sewer. He asked if Mr. Stevens is familiar with Cook County's method of measuring post rehabilitation flow rates in gallons per capita per day (GPCPD) and what his opinion of it is. Mr. Stevens stated that no one does the GPCPD method anymore. He said that the EPA implemented/suggested that method in the 1970's because the flow measuring technology was not reliable. He further elaborated that the program will fail if rainfall data is not included in the metric. The GPCPD method favors more densely populated areas and will harm the less dense areas. He favors measuring the capture coefficient, which is the percent of rain that enters the system, because it does not depend on population. The GPCPD method completely misses the issue of excessive I/I being a rainfall driven problem.
  3. Mr. Dorsey asked for an example of an agency that completed public sector I/I removal work, performed flow monitoring and then determined that private sector I/I sources must be addressed because

the results were not achieved otherwise. Mr. Stevens stated that some agencies did pre-rehabilitation flow monitoring, completed rehabilitation work, did the post-rehabilitation flow monitoring and found it was not as effective as they originally anticipated. The next step for them is to address the private sector. He cited an example of an agency aggressively addressing the private sector which greatly reduced I/I. Mr. Stevens stated that the real question is how to know that the private sector is contributing to the I/I problem. He stated that sump pumps are easy to spot if the basins being metered are small enough. He also cited an example of an agency doing micro-metering, by placing a meter every 800-1000 ft to isolate individual sewer segments and sewer branches. That agency will not undertake rehabilitation work unless the system is micro-metered.

4. Mr. Dorsey stated that micro-metering would be very expensive do to because of the numerous amount of meters to be installed and the wait for a qualifying rain event. Mr. Stevens stated that it depends on how you look at it. With flow monitoring, you are trying to obtain accurate data that is related to a rain event. Once the flow is quantified and you know that there is a problem in the system, you have to determine where the problem is and where most of the flow contribution is located. Rehabilitation work is then focused only on the contributing areas and resources are not wasted on areas that do not need work.
  5. Mr. Al Hollenbeck, RJN, asked what the duration of flow monitoring programs are required in the consent decrees. Mr. Stevens stated that he has not seen anything less than one year; on the east coast they are normally 18-months to include two wet seasons and one dry season.
  6. Mr. Jerry McGovern, MWRD, asked how one can detect the presence of sump pumps when analyzing flow data. Mr. Stevens stated that you can, if the sub basins are small enough.
- C. Ms. Maureen Durkin gave a slide presentation regarding a timeline update to develop the new I/I Ordinance language.
1. Mr. Adam Gronski, MWRD, summarized the SSO reporting process required by the IEPA. He also stated that IEPA is in the process of requiring CMOM to be part an agency's NPDES permit.
  2. Mr. John Wiemhoff, USEPA, stated that in Wisconsin there is a draft rule that will require NPDES Permittees, including satellite communities, to have a CMOM program developed and implemented in a 5-year period.
  3. Mr. Hollenbeck stated that a program that relies only on the metric of SSO's and basement backups without a flow based metric is unique and he has not seen it before.
  4. Mr. Dorsey asked if there will be a distinction between basement backups that result from blockage in a private lateral (e.g., roots) or

as a result of a surcharged public sewer. Ms. Durkin stated that all basement backup incidents would be required to be reported to the IEPA with an annual summary report to the MWRD. She stated that a mechanism should be in place if a resident would like to contact the MWRD directly regarding backups. She stated that any incident would be reported with the understanding that all incidents are not the result of an I/I problem. The goal is to find a pattern of SSO's and basement backups problems in order to determine if the problem is unique to the property or if it is a result of an area-wide I/I.

5. Mr. Al Berkner, Sewer Systems Evaluations, stated that some residences may have protections of backflow preventers or standpipes; therefore, backups won't happen and asked how those situations would be addressed. Ms. Durkin stated that there would have to be an SSO event somewhere or a pattern of SSO's in a specific area, which could be investigated.
6. Mr. Dale Schepers, Village of Tinley Park, asked that considering the absence of a flow based performance measurement, how investigations will be conducted to determine the source of the SSO or basement backup that occurred. Will those investigations be conducted on a case-by-case basis with the MWRD being the authority on where the problem is, how to quantify it and how to fix it? Ms. Durkin stated that the MWRD would likely be the authority on those issues and that it is difficult to have regulations that fit every situation in absence of flow based criteria.
7. Mr. Schepers asked how the MWRD would handle situations where different satellite communities are claiming that they are contributing to each others SSO's or basement backups. Ms. Durkin stated that the MWRD role would be to ask the communities to prove their claims of problems originating from an upstream community with flow metering. She stated that the MWRD would reserve that right and authority. The MWRD may flow meter to verify the data, and then require steps to be taken to correct the I/I problem.
8. Mr. Wiemhoff asked if the IEPA would like to have basement backups be clarified in the reporting form. Mr. Jay Patel, IEPA, stated that any additional information on the reporting form is helpful. He said that the IEPA's main concern is that the local authority must take measures to prevent the recurrence of backup. Mr. Wiemhoff stated that when the USEPA does investigations on basement backups, they look at the receiving sewer from the upstream and downstream manhole. If the sewer is free flowing, it becomes the responsibility of the homeowner, and it is documented. He stated that overwhelming the state with reports of basement backups which are the homeowner's issue should be avoided.
9. Mr. Fred Vogt, City of Rolling Meadows, voiced his concern with regulating the consistency in reporting and how it will be done. Ms. Durkin stated that it is anticipated that when an incident occurs, it will be reported to the IEPA with their reporting form. Any incidents occurring within the last 5-years would be reported to the MWRD in

conjunction with the annual summary report [under the Long-Term O&M Program].

10. Mr. Patel asked if the MWRD will require the reporting of SSO's and basement backups to the IEPA in the draft ordinance. Ms. Durkin stated that requirement is included in the draft ordinance. Mr. Patel stated that agencies that don't have an NPDES permit are not required to report SSO's, even though SSO's are illegal. He stated that there is no reporting requirement for those agencies without NPDES permits.
11. Mr. Vogt stated that consistency of what constitutes an SSO would be helpful to the communities.
12. Mr. Wiemhoff stated that the standard IEPA reporting form does not have a section for the basement backups so the form would have to be modified. He also stated that Wisconsin has a general permit for satellite communities that require reporting of SSO's, which is not the case in Illinois.
13. Mr. Hollenbeck stated that if the intent is to document the incidents and report them, he doesn't believe there is a requirement for the satellite systems to do so under penalty of law. He also stated that there must be a standard for what is reported, who it is reported to and at what frequency. Mr. Patel concurred stating that currently, satellite communities are not required to report incidents.
14. Ms. Durkin stated that the MWRD's draft NPDES Permits state that the MWRD will have the authority to take action with satellite systems over and beyond what is in the Sewer Summit Agreement to address excessive I/I. She stated that if the MWRD is asking for SSO's and basement backups to be reported, then that action is beyond that in the Sewer Summit Agreement. Mr. Hollenbeck stated that there is more accountability of reporting SSO's and basement backups to the MWRD than there is to the IEPA since the law does not require it. He suggested that any reporting requirement be clarified because it may not be clear to the satellite communities.
15. Mr. Dorsey asked if the City of Chicago is required to report all their basement backups since they have a combined sewer system. Mr. Patel stated that any dry weather SSO's must be reported. He also stated that the combined sewers overflow into the MWRD TARP system for treatment before discharge.
16. Mr. Hollenbeck suggested that the MWRD legal department provide an opinion on the reporting requirements which are included in the draft ordinance.
17. Mr. Wiemhoff stated that a legal review should be conducted since MWRD will require the incidents be reported to the IEPA; however, there is not a general permit requiring satellite communities to do so.
18. Ms Durkin asked the IEPA and USEPA, if using SSO's and basement backups as a metric on how I/I control is doing and how well it is

managed is acceptable. Mr. Patel stated that approach is acceptable for I/I control; however, SSO's are a violation. He stated that under an I/I reduction program, SSO's are not authorized until I/I is reduced. Mr. Wiemhoff stated that SSO's are prohibited. He stated that the USEPA is not involved with how much I/I is excessive and the MWRD having to treat it. The USEPA is involved with SSO's, if the IEPA is overburdened. He also stated that he would like the USEPA's legal team review the idea of the MWRD requiring the satellite communities to report incidents to the IEPA even though the IEPA does not require it.

19. Mr. Hollenbeck stated that in the absence of flow based criteria, the only mechanism that provides information for the metric of compliance are SSO's and basement backups. Therefore, it must be standardized and if it is not reported on a certain basis it is an inherently flawed metric. If the flow based criteria was still in the mix, it wouldn't be as important.

20. Mr. Sean O'Dell, Baxter & Woodman, stated that he is in favor of MWRD sponsored funding for I/I removal. He suggested a grant from the MWRD for the disconnection of sump pumps because the MWRD would directly benefit from not treating the I/I from the disconnection. Mr. Hollenbeck stated that grant money from the USEPA or IEPA is not realistic due to the economic environment and any type of funding would be a loan at an attractive interest rate. Ms. Durkin stated that a loan program is currently being discussed.

21. Mr. Chris King, Robinson Engineering, asked when the ordinance would be adopted if the MWRD Board of Commissioners received the draft ordinance language in July, citing his concerns of municipal budget cycles. Ms. Durkin stated that the ordinance could potentially be adopted and be effective on January 1<sup>st</sup> 2014. She stated that the draft ordinance is written in a way that does not expect the entire system to be assessed immediately, and allows a few years for certain milestones to be achieved.

D. The next ATP meeting is scheduled at 1:00pm on Thursday April 11<sup>th</sup>, 2013 at the LASMA Visitor Center.