Meeting Minutes

Advisory Technical Panel – Updating Infiltration and Inflow Control Program

Location: MWRD LASMA Visitor Center

Date: January 16, 2013 1:00pm to 4:30pm

Attendees: See attached

1. Ms. Maureen Durkin, Supervising Civil Engineer, MWRD, welcomed the ATP Members and gave a slide presentation regarding the draft version of the Private Sector Inspections Ordinance. The ATP members from MWRD prepared this draft after several rounds of discussions/consultations with Messrs. Alan J. Hollenbeck, Paul Kendzior and Ross Dring.
   1. Mr. Sean Dorsey, Village of Mount Prospect, asked if there is any flexibility with the private property inspections being conducted on an 8-year cycle. Ms. Durkin stated that the MWRD would like to have private properties regularly inspected and not limit it to a one-time inspection. She also mentioned that a 5-year inspection cycle was first considered; however, the subcommittee concluded that the short cycle may be an overly aggressive approach so an 8-year cycle was included.
   2. Mr. Dorsey stated that his Village has been conducting inspections for several years which are coupled with their water meter replacement program. The Village is divided into 14 areas and inspections are conducted on a specific area annually. Mr. Dorsey stated his concern is with the difficulty of shortening the Village’s current 14-year inspection cycle to an 8-year inspection cycle. He also stated that few reconnections were found during re-inspection. Ms. Durkin asked if the trigger for inspection is the water meter replacement. Mr. Dorsey stated that during the water meter replacement an inspection is conducted to determine if sump pumps, footing drains and downspouts are connected to the sanitary sewer.
   3. Mr. Alan Hollenbeck, RJN, stated that reconnection is more likely on smaller property lots with poor drainage because the homeowner does not like ponding water in the backyard, while the reconnection is less likely if the property lot is larger with better drainage.
   4. Mr. Fred Vogt, City of Rolling Meadows, suggested that after the first round of private property inspections, the priority of the second round of inspections should be toward those having violations or a higher risk of reconnection and not focus on homes found to be in compliance. Ms. Durkin stated that in addition to a longer 8-year inspection cycle, the properties to be inspected were narrowed to those located in problem areas with SSO’s and basement backups including the areas upstream that may be contributing to the problem area, as well as areas where the agency believes there is likely hood of illegal connections. She stated that a re-inspection of specific properties where illegal connections were found should be conducted within 4-years, while properties that were found not to contain illegal connections would be but back on the 8-year inspection cycle. Additionally, if the property, after an internal inspection, is found to have a full basement without a sump pump or is built on a slab, follow-up inspections are not required.
   5. Mr. Eric Murauskas, Baxter & Woodman, asked if an agency has to conduct inspections on a system if it does not experience problems. Ms. Durkin stated that situation leaves inspections up to the discretion of the agency. If SSO’s and basement backups do not exist in the system and the system does not contribute to a problem area downstream, then inspections may not be necessary. However, if the system is tributary to a known problem area, inspections are required.
   6. Mr. Chris Breakey, South Lyons Township Sanitary District, stated that some of the SSO’s and basement backups in his District occur due to upstream I/I being a contributor to the downstream system. The downstream area does sewer rehabilitation work assuming it will fix their sewer problems, however; that work does not fix the problems because the upstream area is a contributing source. Ms. Durkin stated this situation would favor mandatory private property inspections being done regardless if the property is in a problem area. Mr. Breakey stated that he lives in an area with the houses built on slabs and there is significant infiltration in the laterals. There are also multiple cleanouts installed, due to abandonment of septic systems, and the cleanout cap is missing so it acts as a yard drain. Ms. Durkin asked if a distinction should be made between internal and external home inspections. Mr. Breakey stated that a distinction should be made because a home built on a slab may not have an internal I/I source.
   7. Mr. Hollenbeck stated that the subcommittee discussion of the draft Private Sector Inspections Ordinance (ordinance) was focused on internal inspections and sources connected to the house. The service lateral and the cleanout were not discussed and he is unsure how finding defects with them can be effectively done without smoke testing. He believes that the lateral and cleanout are a different private sector issue outside the focus of the internal inspection. Ms. Durkin suggested smoke testing on a regular basis instead of external inspections. Mr. Hollenbeck stated that open cleanouts and defective laterals would be identified when the public sewer is smoke tested.
   8. Ms. Durkin asked the ATP Members if they are concerned with the idea of inspections being at the discretion of the agency could potentially put another community at risk. Mr. Murauskas stated his concern is that a community may have conveyance capacity for I/I and may not experience SSO’s and basement backups, so they will not do inspections because they do not think that there is a problem with the system. He stated that he believes that there should be a minimum number of inspections per year regardless of problems within the sewer system. Mr. Breakey stated that upstream communities are reducing the downstream sewer system conveyance capacity for their service areas. He is also concerned with the upstream areas not removing I/I from their systems because they do not experience problems.
   9. Mr. Hollenbeck suggested that ordnance language be added to address the upstream system while maintaining the concept of requiring inspections in problem areas associated with SSO’s and basement backups. Mr. Paul Kendzior, Village of Northbrook, stated that the intent was not to inspect each property and suggested that the ordinance language include defining upstream properties that may or may not be contributing to a downstream SSO or basement backup. Ms. Durkin concurred and stated that ordinance language addressing upstream inspections will be included.
   10. Mr. Hollenbeck asked if there will be a requirement that all SSO’s and basement backups must be reported to the MWRD. Ms. Durkin stated that there was initial thought on that requirement but it was reconsidered because SSO’s and basement backups are required to be reported to the IEPA. The thought now is to have agencies continue to report to the IEPA as required, and also submit an annual summary report to the MWRD.
   11. Mr. Ross Dring, Kimberly Heights Sanitary District, stated that his concern with the 8-year inspection cycle is the cost associated with it. He stated that his District conducted inspections on all the homes, which included smoke testing and re-inspections after disconnections and repairs, and the cost was 2.5 times the total yearly revenue of the District. He stated that if only inspections were conducted the cost would be one year of total revenue. Results of the inspections within the District concluded that less then one half of the homes had any problems (illegal connections, open cleanouts) and questions spending funds on re-inspections, when the possibility of a reconnection is low. He suggested using the funds, allocated for re-inspections, to address the defective laterals, which are the largest contributor to the I/I problem. He stated that all the main line sewers in his District were lined and he still expects to have an I/I problem due to the defective lateral and would rather use re-inspections funds to address the laterals. Mr. Hollenbeck stated that ordinance language could be included addressing reconnections not occurring then re-inspections can stop after a reasonable amount of them have been conducted.
   12. Mr. Bill Meyer, Village of Oak Lawn, suggested that re-inspection occur on a percentage of homes that were found to have illegal connections. Mr. Hollenbeck stated that at some point all the homes are inspected when considering the property transfer inspection requirement. Mr. Dorsey stated that requiring an inspection when a property transfer occurs is problematic. Most communities collect a property transfer stamp; however, advance notice and the ability to secure a time to conduct the inspection will be difficult. He stated that he has trouble obtaining advance notice for the final water meter reading and to delay a sale for a non-inspection will have pushback from realtors. Mr. Hollenbeck stated that the escrow option was included in the ordinance so that the sale of the property would not be delayed and there would be a financial incentive to conduct the inspection and correct any illegal connections. Mr. Dorsey stated that the escrow would be taken off of the sale price and since homes are underwater and being sold short, it will be tough to sell the idea. Mr. Hollenbeck stated that most village boards had pushback from realtors requiring the inspection, but they passed the requirement. He believes that by the MWRD having an ordinance in place will help the communities adopt the requirement quicker.
   13. Mr. Dorsey asked if the ordinance being developed by the MWRD and the ATP must be adopted locally. Ms. Durkin stated that the local agency must adopt an ordinance that, at a minimum, meets the MWRD ordinance.
   14. Ms. Durkin asked if the Village of Mount Prospect requires a final water meter reading prior to closing the sale of a home. Mr. Dorsey stated that it is the Village requirement, but he receives an extremely short notification. He stated that usually the request for the final read is the Village’s first notice that the property is going to be transferred.
   15. Mr. Hollenbeck stated that he suspects short sales will be problematic with the inspection requirement. He stated that his experience with communities implementing the inspection requirement, the realtors do not agree with it at first but eventually they realize that there is no value in fighting the requirement because they want to close the sale.
   16. Mr. David Weakley, City of Palos Hills, stated that the reason he asked the MWRD to take the lead in passing an ordinance requiring an inspection upon transfer of property is so that the requirement would come up when a title search was performed. He said that since his City is a non-home rule community, they can not call it a tax so it will not show up when performing a title search. He stated that the MWRD should be able to get past the home rule issues that the smaller communities have and have that requirement show up on a title search.
   17. Mr. Breakey stated that his Sanitary District overlays two communities, one home rule and the other non-home rule. He stated that in the home rule community there is a transfer tax and would like to require home inspections prior to sale. However, the problem with the non-home rule community is that there cannot be a transfer tax so there is not a notification for the home inspection.
   18. Ms. Durkin stated that the MWRD has the ability to encumber a property for stormwater detention, which would show up on a title search, but she is not certain if the MWRD has the authority to put a requirement on individual properties. Mr. Kendzior stated that a recording would have to be made against every property, which would be expensive and time consuming.
   19. Mr. Weakley stated that his City has recorded documents against properties with the Recorder of Deeds, but they do not come up in the title search because they cannot be called a tax. Non-home rule communities cannot impose a tax against its residences unless the public votes for it and passes it. He said that the challenge is being a non-home rule community and is asking the MWRD to help with these challenges.
   20. Mr. Meyer stated that his Village is home rule, and would like the MWRD to pass an ordinance requiring home inspections for home rule and non-home rule communities because he doesn’t believe there is enough public support for the inspections. He also stated his concern with the draft ordinance indicating that it must be adopted by January 1, 2014.
   21. Mr. David Weakley stated that his non-home rule community requires a way to notify the buyer and seller of the property that a home inspection is required. The only way that this requirement will show up on a title search is if it is called a tax, and the non-home rule community cannot call it a tax. Mr. Kendzior stated that it appears that the only way to accomplish the notification is to record the requirement against all the properties, which is impractical. Ms. Durkin asked if the home inspection were referred to as a tax, would it show up on the title search. Mr. Weakley stated that is his understanding.
   22. Mr. Hollenbeck asked if the MWRD Law Department has reviewed and responded to the draft ordinance. Ms. Durkin stated that the draft ordinance has not been sent to the Law Department yet for review. She stated that the Law Department has stated that the MWRD has the authority to pass an ordinance for private property inspections. The Law Department has not responded if the MWRD can apply that authority to townships, public utility companies, or home rule and non-home rule communities.
   23. Mr. Hollenbeck asked if the Law Department agreed with the ordinance regarding not issuing sewer permits to communities unless they adopt the ordinance. Ms. Durkin stated that the Law Department has not reviewed the draft ordinance; however, the MWRD has withheld sewer permits in the past if communities did not adopt specific requirements by a specific date.
   24. Mr. Steve Saunders, Village of Winnetka, suggested that the focus should be initial inspections on all properties and re-inspections for those that continue to show problems. He stated that the inspection requirement when a property transfer occurs and inspections of homes in non-problematic areas will not need to be addressed because all properties are to be inspected. He acknowledged that inspecting all properties would be difficult, and may require a longer inspection cycle, but the re-inspection effort can then be narrowed to those that still experience SSO’s and basement backups. Mr. Kendzior agreed with not requiring property transfer inspections; however, he also stated that inspecting all properties cannot be physically done. He agreed with inspections being done within the problem areas and contributing areas, which would make each inspection meaningful and purposeful.
   25. Mr. Breakey stated that he doesn’t think that the intent is to inspect every property, only those in the problem areas. He questioned why an inspection should be done on newer homes that have PVC sewer pipe installed. Ms. Durkin stated that the intent is to conduct inspections in problem areas that experience SSO’s and basement backups; however, inspections should also be conducted in areas that may be contributing to a problem area.
   26. Mr. Dale Schepers, Tinley Park, asked if the ultimate goal is to achieve a flow of 150 GPCPD or some other acceptable flow rate. Ms. Durkin asked if there should be some type of flow metering. Mr. Schepers stated that flow metering would demonstrate if conducting inspections are working by showing reduced flow rates. A community may cite that conducting inspections is extremely expensive and decide not to do them, however; flow metering that system will provide evidence that there may be excessive I/I in their system, which would then be required to be addressed.
   27. Mr. Hollenbeck stated that early on, the ATP discussed that the I/I control program can on flow-based criteria and performance-based criteria, but doesn’t remember if those items were resolved. Ms. Durkin stated that the metrics for compliance still need to be worked out. She did state that Mr. David St. Pierre, Executive Director, does not want to go in the direction of flow-based criteria. The criteria of the new I/I control program should be activity-based.
   28. Mr. Schepers stated that certain communities may not experience SSO’s and basement backups, but still have an excessive I/I problem and will not know it unless the system was flow monitored.
   29. Mr. Weakley stated that adjacent communities were contributing flow into his City’s sewer system which was discovered by using flow meters. He stated that a great effort to reduce the excessive I/I within his City’s sewer system was being done, but the flow was still excessive due to the upstream community. He also cited examples of the large cost of flow monitoring and the difficulty of comparing wet weather flow rates due to the variation of storm events. He stated that while he thinks that flow monitoring has a purpose, he is in favor of a performance-based metric.
   30. Mr. Chris King, Robinson Engineering, stated that it appears that the intent is to have performance-based metrics (elimination of SSO’s and basement backups) but the ordinance may need to address the areas upstream of the problem areas regardless of the community boundary. Ms. Durkin concurred.
   31. Mr. Hollenbeck stated that the difficulty of approving the requirement of a property inspection when it is transferred and the amount of flow removed from the system is not worth perusing considering the amount of pushback and the expense associated with it. He suggested that the most cost-effective solution is the initial inspection and re-inspection program.
   32. Mr. Weakley stated that his City’s ordinance requires a property inspection upon sale of a home, and the burden is on the seller and the buyer. He stated that if a homeowner contacts the City with a problem and house entry is required to assess it, a sump pump inspection is also conducted. If the sump pump is found to be connected to the sanitary sewer, they receive a violation notice and they have 30 days to disconnect it. The homeowner is required to get a building permit and a plumbing inspector inspects the disconnection. He stated that the City also does internal inspections during the year.
   33. Mr. Weakley stated that his concern is the requirement of training and certification for inspections, because it may dictate the number of inspections that can be done annually. He asked what will trigger a mandated inspection. Ms. Durkin stated that the problem area criteria (SSO’s, basement backups, double pumping at lift stations) will trigger an inspection.
   34. Mr. Hollenbeck suggested ordinance language to couple the performance-based metric driving the inspection with a modest amount of flow monitoring to address systems with excessive I/I that do not encounter problems. Ms. Durkin stated that the concept of coupling the two metrics would have to be developed. Mr. Hollenbeck stated at the first ATP Meeting, it was shown that the MWRD Water Reclamation Plants have experienced higher peak flow rates over the years, so it can be concluded that SSO’s and basement backups are not the only problem.
   35. Mr. Breakey cited an example of two communities within his Sanitary District where one does not experience any SSO’s or basement backups, while the other does. He suggested a hybrid ordinance including inspections and flow monitoring. Mr. Kevin Fitzpatrick, MWRD, stated that funds should be spent on eliminating SSO’s and basement backups first, and then funds could be spent on flow monitoring after the problems are corrected.
   36. Mr. Breakey asked if the MWRD could isolate a few communities that are tributary to an Interceptor and then have those communities work together to solve the problems. Ms. Durkin stated that it may work in several cases.
   37. Mr. Hollenbeck stated that known SSO’s and basement backups are the criteria that drive the internal inspection; however, in the absence of those, flow metering to determine a reasonable flow rate under a specific storm event leads back to achieving the 150 GPCPD guideline. Mr. Hollenbeck stated if a hypothetical community has no documented evidence of SSO’s or basement backups and determined that their flow rate is 1000 GPCPD for an MWRD-yet-to-be-determined storm event. The MWRD will respond that the system requires rehabilitation because is not at 150 GPCPD. He stated that this type of situation will be difficult to accommodate and there will be pushback.
   38. Mr. Weakley suggested allowing communitises an option of either flow monitoring or establishing a more active inspection program. Mr. Hollenbeck stated that the 8-year inspection cycle for problem areas consisting of SSO’s and basement backups occurring in 1% of the system should not be a problem. However, as that percentage increases, it may become an issue. Mr. Weakley stated that the system at the highest elevation can be eliminated because they will not experience SSO’s or basement backups. Mr. Patrick McAneney, Village of Glenview, stated that the higher elevation areas are still I/I contributors. He believes that newly constructed areas within the last 15 years that has PVC sewers installed can be eliminated from the inspection requirement. He also indicated that the inspection cycle must be longer when the percentage of the community meeting the inspection criteria is higher. Ms. Durkin stated that newer developments with PVC pipe were addressed in the lateral replacement section, but they may be an I/I contributor [e.g., private sector illegal connections] and were not eliminated from the inspection requirement.
   39. Mr. Weakley stated that he has encountered newly constructed homes that have sump pumps connected to the sanitary sewer. In once case he found a newer home that had two sump pumps connected to the sanitary sewer. He found this situation because the public main line sewer was being lined in the area and the home owner called the City to complain about flooding. Mr. Breakey stated that he has not encountered [within his jurisdiction] sump pumps of new homes being connected to the sanitary sewer.
   40. Mr. Hollenbeck suggested having a sampling program where the community does a large number of inspections in a specific area and if illegal connections are not found within a large sample, then further inspections in that area are not required. Ms. Durkin agreed with the idea and indicated that ordinance language would be developed.
   41. Mr. Dorsey asked what will be done with the footing drains. Ms. Durkin stated that they should be documented with the thought of them being eventually disconnected in the future.
   42. Mr. Vogt asked that the MWRD develop an inspection form and provide training for inspections to provide consistency. Ms. Durkin asked the ATP Members if it would be valuable if the MWRD were to provide inspection training. The ATP Members stated that it would be beneficial and provide uniform inspections.
   43. Mr. Dorsey asked if the MWRD would require inspection forms or a summary report of the inspections. Ms. Durkin stated that the MWRD would like to have an annual summary report of inspections and suggested developing a standardized inspection form for the agencies. Mr. Dorsey stated that his Village has adapted inspection forms over time and enter the information into a computer software program so that reports can be produced.
   44. Mr. Hollenbeck stated that finished basements are becoming common and determining the location of the sump pump outlet can be difficult to determine, so dye testing must be done. He suggested that without dye testing being part of a standardized inspection process, a high number of inspections can be indeterminate.
   45. Mr. Schepers stated that if the intent to televise the lateral is to determine a good operating condition, that conclusion isn’t easily determined with a clay lateral. Mr. Kendzior agreed and suggested that clay material should be removed from the ordinance language. Mr. Breakey stated that a clay lateral can be lined and doesn’t necessarily have to be removed, which is more affordable for the homeowner. He also stated that if the homeowner is doing a significant remodeling of their home, including additional fixtures, the lateral should be addressed.
   46. Mr. Hollenbeck stated his concern with the cost of addressing a lateral compared to that of a home expansion. He stated that when constructing a new home, there is a small cost of addressing that lateral; however, that comparison is more significant with a home expansion. Mr. Kendzior stated that there may be pushback with the requirement to address that lateral if the home expands more than 25%. Ms. Durkin acknowledged the concern but noted that several village ordinances do limit the amount of building space on the property and a 50% expansion may not be feasible.
   47. Mr. Vogt asked if he were to remodel an entire house and add a bathroom without expanding the occupied space, would the lateral need to be addressed. Ms. Durkin stated that the lateral would have to be addressed due to the bathroom addition.
   48. Mr. Weakley stated that the communities could take advantage of reduced costs associated with lateral work if the MWRD had a contract with a vendor to do the work. Mr. Schepers stated that another advantage of the MWRD having a contract for lateral work is the progress of work being completed. Mr. Breakey asked if a bank would do a payout for a construction loan for work to be completed in the future, because payouts are normally done for completed work. Mr. Schepers suggested that the MWRD be the banker for the work.
   49. Mr. Vogt asked if the ATP Members are comfortable with the ordinance language being date specific on items like the exemption of properties being a specific age or should it be tied to performance of sewer pipe. Ms. Durkin concurred and(?) suggested having the ordinance address a moving date.
   50. Mr. Dorsey asked if all agencies have to pass an ordinance by the January 1, 2014 that meets the minimum requirements of the draft ordinance. Ms. Durkin stated yes and that she is aware of that date being difficult to achieve. Mr. Dorsey stated that there are several agencies that do not have an ATP Members, and they would have to familiarize themselves with the MWRD ordinance prior to adopting their own, which would prolong the timeframe. Mr. Kendzior suggested that the MWRD prepare a model ordinance so that a review of all the individual ordinances would not have to be done. He also suggested a 6-month grace period of passing the individual ordinances after the MWRD passes their ordinance.
   51. Mr. Allan Berkner, Sewer Systems Evaluations, stated that the idea of the MWRD potentially having a flow monitoring program would be beneficial to the smaller communities. Mr. Dorsey asked if the communities would receive flow monitoring data only. Ms. Durkin stated that only flow monitoring data would be provided; data analysis or consulting services would not be provided. Mr. Hollenbeck stated that the MWRD procurement process has more overhead associated with it than other communities, so there may be savings because of the scale of the work, but the overall cost to the community may be more expensive than contracting the work on their own. Mr. Dring stated that a community could take advantage of the program if it was financially beneficial. Mr. Vogt questioned if the MWRD would be willing to price the contract on an unknown amount of work. Ms. Durkin stated that it would be a unit price contract with an amount of known work to be done, which could be determined by surveying the interest of communities.
   52. Ms. Durkin asked the IEPA if they can say anything regarding the possibility of the MWRD administering the IEPA SRF loans. Mr. Gary Bingenheimer, IEPA, [attending through a conference call] stated that the IEPA and the MWRD need to work out specifics regarding the loan amount, how often it is disbursed, how quickly the loan would be paid back and other issues. He stated that since there is no minimum or maximum loan amount that the IEPA can fund, they would like to participate on a smaller loan amount as a pilot project. Ms. Durkin asked the ATP Members if low interest loans were available from the MWRD, regardless of it coming from the IEPA SRF or another funding source, is there interest in it. Mr. Saunders stated that if it was the most advantageous funding source considering the availability, rates and cash flow then there would be interest in it. Mr. Dorsey stated his concern with the competitiveness of the loans.
   53. Ms. Durkin stated that at previous meetings the IEPA stated that SRF Loan funds were available at the end of the year and suggested that the planning document was a reason that a community would not complete the SRF Loan application. Mr. Hollenbeck suggested that the MWRD prepare an MWRD-wide planning document to meet the IEPA requirements to take the burden off of the communities.
   54. Mr. Roger Vollbracht, IEPA, [conference call] stated that the SRF Loan program has funds available and communities have taken advantage of it for several years. He stated that if the MWRD and IEPA were partners, a general planning document may be able to lessen the administrative issues and costs.
   55. Mr. Hollenbeck asked what the current SRF Loan interest rate is. Mr. Vollbracht stated that it is 1.93%, which is established at one half the General Obligation bond rate each year.
   56. Ms. Durkin stated that the planning document is a hurdle for communities and being able to facilitate it is appealing. Her concern is having the MWRD complete the planning document along with comparing different alternatives because the MWRD does not know where specific sewer system issues are within the communities. Mr. Vollbracht stated that he envisions a different approach, with a report that establishes a need and a summary of different alternatives to be perused whereby the loan would be written to be flexible with the chosen alternative. He stated that he does not expect the MWRD to tell the IEPA exactly what is being done in each community, which takes flexibility on the IEPA side. He stated that he is more concerned with the agreements between all parities involved.
   57. Ms. Durkin suggested that the SRF Loans be administered between the IEPA and the local community and have the MWRD complete the planning document. Mr. Vollbracht expressed concern with their current work load and the IEPA doesn’t have the administrative resources to review and approve additional SRF Loan applications.
   58. Ms. Durkin asked if an administrative rule change is needed to allow the MWRD to administer IEPA SRF Loans. Mr. Vollbracht stated that there would need to be a change in the IEPA loan rules approved by the Joint Committee of Administrative Rules. The rule change process can take one year to complete. Mr. Bingenheimer stated that the entity receiving the SRF Loan must own and operate the facilities, which would require an additional rule change.
   59. [There was discussion about IEPA going to the Geneal Assembly for authority/approval in 2014. That could be included here]
2. The next ATP meeting is scheduled at 1:00pm on Wednesday March 20th, 2013 at the LASMA Visitor Center.