



OLYMPIC VIEW WATER & SEWER DISTRICT

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Board of Commissioners

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In October 2016 Olympic View Water and Sewer District (OVWSD) discovered that the proposed new Madrona School was planning on using deep Underground Injection Control wells for stormwater abatement. At that time, OVWSD contacted the Edmonds School District (ESD) staff and indicated that these proposed wells would be located within the designated Surface Water Supply Protection area, as defined in the 2002 Surface Water Protection Plan, 5-10 year zone.

The proposed 16 deep Underground Injection Control wells are to be drilled to a depth of 80-120 ft. deep. They are proposed to be in four areas, in clusters of four wells each. Only one area of drainage will be pretreated -- the parking lot. The parking lot run-off will be treated using a 2500 square foot bioswale and an oil/water separator, prior to being allowed to run into the four wells adjacent to the parking lot (oil/water separator treatment is ineffective for gasoline contamination). All other areas are considered nonhazardous areas, roofs, sidewalks, common areas and access roads, and these will be allowed to drain directly into the wells with no pretreatment.

In a December 5, 2016 letter from Robinson Noble, OVWSD's long-term consulting hydrogeologist, who was responsible for the modeling of the Surface Water Protection Plan infiltration map, indicates that there is a potential threat to the spring water source for Deer Creek when the confining layer of the aquifer is breached, and storm water is allowed to run, untreated, into the ground 80-120 feet below the surface. (Exhibit 1)

In a presentation prepared by ESD, a drawing of the approximate locations, the depth of the Underground Injection Control wells in relation to the aquifer water level and the Wellhead Protection Areas drawings were presented. As shown, the deep Underground Injection Control wells are located within 4,000 feet of the headwaters of the Deer Creek Watershed. (Exhibit 2)

In March 2017, ESD issued an addendum to the SEPA (Exhibit 3) for the Madrona K-8 School Replacement Project in which ESD addresses the additional analysis required based on concerns voiced by OVWSD. Included in the SEPA is the evaluation of Wellhead Protection Areas. The SEPA Addendum, page 7, references City of Edmonds Code which stated that there "are no areas meeting criteria for CARAs exist in the vicinity of the city of Edmonds" and therefore does not provide for additional specific provisions for protection. The third-party consultant, retained by ESD in April 2018, states "PGG's opinion is that the City code errs in indicating that no areas meeting criteria for CARA exist in the vicinity. The method used by USGS (United States Geological Survey) to assess sensitivity assigns most of the Qva outcrop area in Edmonds as "low sensitivity", which is not true for the Qva outcrop area near the Deer Creek water source." This indicates that additional consideration should be given the siting of the deep Underground Injection Control wells within the Deer Creek Source Protection Plan area.

On March 10, 2017, OVWSD responded to staff that the SEPA Addendum failed to address the concerns voiced by OVWSD regarding the protection of the water supply source.

On April 19, 2017 ESD staff forwarded the Draft Groundwater Monitoring Plan, (Exhibit 4) in which the OVWSD requested changes regarding 1) increased frequency of testing, 2) extended duration of testing and 3) pretreatment for all sources were not addressed. Also, not addressed were the addition of upgradient monitoring wells and testing prior to release into the deep Underground Injection Control wells.

To facilitate ESD's construction timeline and its coordination with the City of Edmonds, OVWSD, ESD and the City of Edmonds entered into an agreement that stated that water and sewer plans would be approved and the construction permit could be issued but that occupancy would not be requested by or granted to ESD until OVWSD agreed to serve water to the new building. (Exhibit 5)

On June 29, 2017 a meeting was held, both onsite and at the offices of OVWSD to discuss the deep Underground Injection Control wells and OVWSD concerns. In attendance were representatives from EDS, DOE, DOH, City of Edmonds and OVWSD. At the end of the meeting another meeting was scheduled. Prior to the second meeting an agenda/presentation was given to the participants. The agenda/presentation emphasizes how the current plan meets all requirements and guidelines and again fails to address any of the concerns voiced in the past by OVWSD, the Department of Health and Robinson Noble. (Exhibit 6)

In September of 2017 ESD requested specific information on OVWSD requested changes in the requirements. On November 13, 2017 a detailed list of items was forwarded to ESD, as requested. On November 21st ESD responded that they would follow DOE Guidelines and no additional testing would be done. (Exhibit 7)

ESD's position has steadfastly remained that their plan does not put the drinking water into any danger of contamination. They state that they have gone above and beyond what is required by DOE in the design and proposed maintenance of the wells so that the drinking water will not be adversely impacted.

On February 20, 2018 ESD forwarded their Final Groundwater Monitoring Plan – again not taking any of the requests from OVWSD into consideration. (Exhibit 8)

In March ESD staff suggested that mediation be tried to reach an agreement. Given the complexity of deep Underground Injection Control wells, wellhead protection, ground water and a variety of other issues associated with this it was determined that a third-party hydrogeologist firm would be jointly hired to evaluate the situation and offer suggestions.

On March 12, 2018, a proposal was received from Pacific Groundwater Group detailing the process that was proposed. (Exhibit 9) OVWSD requested that additional items be added to the scope of work. On April 16, 2018, a meeting was held between ESD and OVWSD to discuss the mediation/review process. On April 18, 2018, ESD contacted OVWSD's attorney and indicated that they would like to have the agreement completed by noon on Friday, April 20, 2018, otherwise they would consider going ahead without OVWSD participation. At 12:18 on Friday, April 20, OVWSD was notified that ESD would be proceeding without OVWSD agreement in scope or and interlocal agreement.

On April 19, 2018 a letter was received from the Department of Health indicating concerns for OVWSD's drinking water quality if the deep Underground Injection Control wells were allowed to go forward. (Exhibit 10)

On April 24, 2018, Lynne Danielson attended the ESD School Board meeting to voice concern over the apparent halt in negotiations between ESD and OVWSD. At that time Kris McDuffy, ESD School Superintendent stated that this was a complicated issue and that negotiations were ongoing. A copy of the letter presented to the ESD Board and a copy of the letter from DOH were later emailed to each School Board member.

On April 27th, 2017 OVWSD received notice that a meeting was scheduled with PGG at 8:30 a.m. on April 30, 2018. The email indicates that ESD staff understands that this is short notice but would offer a future date for a meeting with PGG for OVWSD if necessary. OVWSD was able to attend and provide information to PGG.

On May 14, 2018, a letter was sent to Heather Bartlett of DOE from Robinson Noble, again expressing OVWSD's concern about the potential long-term effects of deep Underground Injection Control wells on the water supply for OVWSD. (Exhibit 11)

On May 25th, 2018, a Water Service Agreement was forwarded to ESD for review. It details the requirements in order for OVWSD to provide water to the new school by June 1, 2018. As of this date, there has been no response to this submittal. (Exhibit 12)

On June 1, 2018, OVWSD received a copy of the PGG's third party report. The report is attached. While it again supports that ESD is planning to take required measures to ensure the non-degradation of the ground water, it "**cannot be guaranteed.**" (Exhibit 13)

PGG's report provides responses to the same questions that the original design was required to address. What is missing is the opinion of whether the use of these types of stormwater wells is an appropriate use in the 5-10 year zone of a wellhead protection plan, which is one of the questions requested by OVWSD. There are at least two references to a high level of confidence if all measures proposed are implemented and followed but PGG emphasize that they "do not guarantee it".

There is a dependence on the soils between the bottom of the Underground Injection Control well and the top of the groundwater level for filtration. This material is designated as a low to medium which indicates that the soils have some filtering capacity.

In the independent review, PGG lists one city, the City of Redmond, that allows Underground Injection Control wells to be used within wellhead protection zones. Pierce, Snohomish and Kitsap County all prohibit the use of deep Underground Injection Control wells for storm-water. Other cities contacted by OVWSD, do not allow the piercing of the confining layer for deep Underground Injection Control wells due to the risk of contamination. There is also the issue of being able to clean or replace the filter material at a depth of over 20 feet, much less 80-120 feet.

OVWSD has an obligation, under Title 57 of RCW to protect the water source used to provide water to our customers. Our concern for the potential contamination is based on past experience, the substantial fuel spill at the Old Woodway High School site which dumped gasoline into the storm system and eventually into Deer Creek, below the water treatment plant was no one's fault but it did happen. OVWSD does not believe that ESD would ever intentionally take actions that would contaminate the water that they drink.

While OVWSD would prefer that these wells not be used at all in a wellhead protection area, we do recognize that there is a challenge being faced when dealing with stormwater. This is why OVWSD has attempted to reach a compromise with ESD so that the Underground Injection Control wells can be used and OVWSD can meet its legal obligation to protect its water source.

There is one guaranteed way to keep ESD from contaminating the water supply and that is to not use deep Underground Injection Control wells at all. The alternative is to work with OVWSD to go above and beyond requirements set by DOE.

The failure to implement the additional testing, extended testing time and safeguards may result in the contamination of the water source, however unlikely. Once the source is contaminated, the costs of fixing that, if it can be fixed, is prohibitive, both in the effect on human lives and infrastructure costs. It is OVWSD's opinion that no amount of cost savings is worth the health and welfare of our customers and no amount of intentional contamination is appropriate. OVWSD is not being obstructive in its decisions, but the protection of our customer's drinking water supply remains our paramount goal.

All Exhibits and information will be made available upon request.

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