Moretown Development Review Board

Minutes of DRB Hearing Held October 25, 2012

Members of the Board present: Erick Titrud; John Riley; Jim O'Neill; Raymond Munn; David Russo

Continued Application of Moretown Landfill for Cell 4

The Board is meeting tonight at the Moretown Town Hall which provides a larger meeting area. The hearing convened at 6:30 PM.

Scott Schaeffer asked that the minutes of the meeting held October 11 reflect that he had raised an issue as to whether the proposed application complies with a land use policy set forth in the Town Plan. The policy at issue is Number 7 and appears at Page 69 of the Town Plan and states development on slopes in excess of 25% shall be prohibited.

In response to a question, John Riley outlined how the Board is proceeding in this matter as a quasi-judicial body which will reach a decision on the pending application based on the evidence presented as documents or as otherwise presented in the context of the ongoing hearings. Several of the neighbors expressed the belief that the DRB should utilize its authority under 24 VSA§4461(c) to hire technical experts to review the analysis and presentations of the experts for Applicant. The Board will take the suggestion under consideration.

Tonight's hearing is devoted to hydrogeology and potential impacts on groundwater associated with the proposed landfill expansion. Tom Badowski and John Haney for the Applicant made a presentation describing the design of the lining and leachate collection systems associated with proposed Cell 4. At the base of the cell there will be a ten foot layer of impermeable soil material. Below this layer is a leachate collection system. The quality of this water is analyzed every six months to determined if water from the landfill operation is reaching this detection level. For the most part, the water that is collected at that layer comes from below, rather than above.

Above the ten foot impermeable base is a first detection level. Above that is a liner. Above the lower liner is a further leachate collection system, before the second liner above. During the period a cell is actively accepting trash, rainwater filters in and through the collected waste material. The design of the landfill is that this water or leachate be collected by the liner and drained to a single discharge location. This leachate is collected, and stored on site, until it is transferred off site to be processed at a sewage treatment plant or other facility.

Eventually, the cell at time of closure is "capped" with an impervious plastic type layer. At that point future rainwater is not expected to penetrate into and filter through the deposited waste material. Rather, rainwater will drain above the cap and into a stormwater detention system. Once the landfill is capped, the remaining volume of water filtering through the waste material will diminish over time.

There was discussion as to whether at some point this engineered system will deteriorate and fail. Some believe the present systems can function for up to a 500 year period. However, this technology has only been in place since the late 1980's. So it is not known how long it can be expected to function. Also, representatives speaking for Sandborn stated that their Company has been involved in landfill construction and monitoring since approximately 1993. One aspect of most sites is that few have been permanently closed, with a tendency to expand and keep sites active.

In response to a question from Dan Nadeau, it was confirmed that the lowest detection system is primarily designed to siphon groundwater away from the base, rather than be a detection of a leaking liner.

Following the presentation about the design and construction of the liner and leachate detection systems, Tim White made a presentation about groundwater near the site. In the summer of 2009 the State of Vermont required a series of monitoring wells be installed as part of a work plan developed by the Solid Waste Division. These monitoring wells were at a depth of 50-110 feet. Mr. White presented slides showing the well locations. Pump tests were performed in 2009 to determine recharge rates and to confirm to what extent water moves horizontally. Groundwater tends to flow in a downward direction and the levels of groundwater can be utilized to provide evidence of the direction of flow. Gradient lines were shown on a screen suggesting a flow roughly in the direction of the existing scale house and then perhaps turning to the right and towards US Route 2. According to Mr. White, the Applicant believes that groundwater generally flows northerly towards the Winooski River, and not westerly towards neighboring residential properties, all of which utilize on site wells for their drinking water.

Neighbors inquired about aspects of proposed Cell 4 which is designed to sit below existing groundwater levels. Part of the proposed expansion will involve pumping water away from the bottom of the liner to artificially lower groundwater levels in the vicinity. A concern was expressed as to possible impact this will have on neighboring wells.

Second, there was evidence about the monitoring wells for purposes of contamination which have been placed near Route 2 and on the landfill property. These wells measure for metals and other contaminants such as VOC's associated with leakage from the landfill and have been tested and monitored for many years. According to the Applicant,

it is believed that the pollution found in these wells arises from the earlier unlined landfill, and paper sludge deposit site, and that actions to cap the unlined landfill, and remove the paper sludge material and use it as cover in Cell 3 have diminished the levels of contaminants measured in these monitoring wells.

To this point the State has never required such monitoring wells be maintained westerly of the site towards the Baughman and other residential properties.

The Board discussed scheduling for future meetings. Because of conflicts with Thursdays, the next meeting of the Board will be Tuesday, November 13 at 6:30 PM at the Town Hall. The Board may meet again on Tuesday, November 20. Erick moves, seconded by Ray to continue the evidentiary portion of the Board's hearing to November 13 at 6:30 PM at the Town Hall. The topic will be odors associated with landfill operations. All approved.

At approximately 10:15 the Board went into a deliberative session to discuss the suggestion that the Board employ experts to assist it in this proceeding. At 10:35 the Board exited the deliberative session taking no further action.

Respectfully Submitted,

John P. Riley