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GAC Minutes

APPROVED

10/11/2022

Town of Northborough

Office of the Town Engineer

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Groundwater Advisory Committee

September 15, 2022

Remote Zoom Meeting

7:00 p.m.

Present (Remotely): Scott Rogers (Board of Selectmen), Anthony Ziton (Planning Board), Bryant Firmin (Water and Sewer Commission), Diane Guldner (Conservation Commission), Theresa Capobianco (Board of Health); Fred Litchfield (Town Engineer)

Members Absent: None

Attendees (Remotely): Dave Bielunis, George Gould, Josh Vitullo, Rachel Weiskind, Bob Allen, Jim Borrebach, Marilyn Seremet

Mr. Rogers opened the remote meeting at 7:00 p.m. and announced that the open meeting of the Northborough Groundwater Advisory Board (GAC) is being conducted remotely pursuant with Chapter 22 of the Acts of 2022, An Act Relative to Extending Certain COVID-19 Measures Adopted During the State of Emergency signed into law July 16, 2022. All members of the GAC are allowed and encouraged to participate remotely. This Act allows the GAC to meet entirely remotely so long as reasonable public access is afforded so that the public can follow along the deliberations of the meeting. The public is encouraged to follow along using the posted agenda unless the Chair notes otherwise. Members of the public who wish to view the live stream of this meeting can do so by going to Northborough remote meetings on YouTube via the link listed on the agenda. Ensuring public access does not ensure public participation unless such participation is required by law. This meeting will not feature public comment. The process was explained.

Member and Staff roll call was taken: Scott Rogers, Bryant Firmin, Diane Guldner, Theresa Capobianco, Anthony Ziton; Fred Litchfield (Town Engineer)

To consider the petition of Aspen Aerogels, Inc. for Modification of the Special Permit for Change of Use and Special Permit Under Groundwater Protection Overlay District Regulations (Case No. 01-19) issued in 2002 for the property located at 30 Forbes Road, Map 15, Parcel 18, in the Industrial Zoning District and Groundwater Protection Overlay District Area 3.

Applicant and Representative: David Bielunis, Sr. Project Manager, Strategic Capital Projects
Aspen Aerogels, Inc.

Mr. Bielunis gave a presentation about the company and what they do. They are a 20+ year old aerogel technology company that started its roots in Northborough; they inspire innovative solutions for energy conservation and storage. They have been strictly R&D and office space at 30 Forbes Road since 2010. They have a license for on-site, above ground storage of flammable and combustible liquids (through the Board of Selectmen) with an adjoining permit with the Fire Department. They would like to increase the

quantities on site to 2,000 gal flammable liquids; 500-gal combustible liquid; 2,000 cubic ft flammable gases; and 11 lbs. flammable solids. Modifications to the Special Groundwater Permit include updating the manual to 2022 practices; updating and amending the list of chemicals and quantities (chemical use has been reduced by 90%); and updating to reflect transition from manufacturing to R&D/office use. They submitted the required documentation per Mr. Litchfield's 9/29/2022 letter. Jim Borrebach (OHI Engineering-a consulting engineering and environmental services firm) was asked to review their facility and operations and to provide his opinion as to whether the modification would result in a significant groundwater degradation; he submitted a report and spoke about some of the key findings. He concluded that the approval of the modification of the Special Permit would not degrade the underlying groundwater to the point where it would represent a significant hazard to public health.

George Gould (Chief Technology Operator) explained the chemical storage and dispensing operations. They are adding approximately 60 scientists and engineers on site and will need more chemical storage in order for them to do their job. Mr. Gould said they believe the risk of chemical releases from their building are small; they have many layers of risk mitigation in place and have a third party to help should there be anything greater than an incidental spill.

Mr. Litchfield reviewed the list of chemicals and wanted to verify the size of the containment; the response was sent to the board. The letter from OHI meets the requirements. He questioned the floor drains; he thought there may be some floor drains in the restrooms and wanted to confirm that there is a physical barrier that would keep a spill from getting under the doors and into the floor drains should there be a catastrophic event. Mr. Gould didn't think there were floor drains in the core bathrooms. There is one near the janitor's closet but it has a 2" berm on it. The package Mr. Litchfield looked at appears that there are two in the women's restroom and two in the men's restroom that specify "FD". Mr. Bielunis said the only bermed area is around the H2 room. Mr. Litchfield said the door jambs are flush and wanted to know if there was a pitched aspect to the floor where the floor drains are and is there anything that can eliminate the possibility from something getting in there. Mr. Gould agreed there should be some impediment to the drains. Mr. Litchfield said if there was something they could do to keep it in the area where the epoxy coated floor is that would be fine. He was also looking to verify that the cabinets can contain whatever is stored in the cabinets and that if all of them were to leak into the cabinet that the sump in the bottom of the containment area was large enough to contain everything. Mr. Bielunis said they were abiding by the federal mandate which is to contain the total volume within the largest container or 10% of the total volume within the cabinet, whichever is greater. Mr. Litchfield confirmed with the Fire Chief that it is the appropriate standard. After again reviewing the list of chemicals, it appears that there are 38 different cabinets; 25 of them meet the recommendation that he had suggested in his memo; 3 of them had blanks and he was not quite sure of them; approximately 10 don't meet his recommendation but do meet the federal standard of the largest container or 10% of the total volume within the cabinet.

The Committee discussed the issue of the limit on the 3,000 square feet of R&D. Mr. Litchfield said staff agrees that manufacturing is a much greater hazard than R&D, due to the number of employees and the volume of chemicals that are being used and the fact that they are reducing the volume so significantly seems fine. The contingency plan is good; they need to iron out the list of chemicals and the volume that we want to recommend to the Planning Board for their consideration. Mr. Litchfield asked for thoughts on the 10-13 cabinets that don't quite store everything that's stored within them if it were to spill out. Mr. Gould thought the release of all the chemicals seems pretty remote; he was comfortable with his calculations. He said there were things that could be done to bring it up to the minimum requirements. Mr. Litchfield noted that it is not a specific regulation, but more of a "past practice" for the board to grant Special Permits. He thinks the project overall is a good project; it's a great business; happy to have them in town and wants to work with them but he needs to get to a point where he can be consistent enough with previous decisions and that we are not stepping up doing something special in their case.

Ms. Capobianco asked for clarification about the federal standard that would apply here that the Fire Chief is applying vs. what we have historically done. Mr. Litchfield said the Fire Chief gave him the

citation and said that it was 10% of the total volume within the cabinet or 100% of the one single largest container within the cabinet. The information they submitted does meet that. He believes that's the industry standard and what we've been doing is overkill which is typically what we do. Mr. Gould asked if they were to put additional containment in the cabinets that aren't meeting something, establish a percentage the Committee would be happy with of the percentage of the largest container that they store. Mr. Litchfield said when he added it up, the total capacity of all the cabinets is greater than the total amount of material that they want to store on site; but when you look at each individual cabinet, it's not there. Ms. Weiskind said they can look at the footprint to see where they are not meeting the requirements and add more flammable cabinets. Mr. Litchfield said he could recommend to the Committee who would recommend to the Planning Board a condition that says the cabinets will accommodate at least 100% of all the chemicals stored within each cabinet. Mr. Vitullo said operationally they will have to think about whether or not it would be feasible for them to be able to continue to add cabinets. Another solution may be to add some external containment to the cabinets themselves or take some voluntary act but not have it be a requirement of the permit because 5-10 years from now they should be following whatever the industry standard is.

Ms. Capobianco asked if their 2002 permit had the 100% requirement; Mr. Vitullo said it did not. The decision said 110%. Mr. Litchfield thought we intended for the 110% of each chemical to be storage provided for each chemical so that there was containment for 110% of whatever chemical there was. At the time there was far more chemical storage proposed and approved. He didn't think the storage was looked at as closely as it is being done today.

Mr. Ziton asked if the loading dock area was vulnerable with delivering, picking up materials, and moving 55-gallon drums. He asked with the worst spill is there any containment outside if the material was to get underneath the door. And, if something did happen, do they start cleaning it up immediately or wait for Clean Harbors to come out? Mr. Gould said they would contain the spill with the sorbent pads and snakes and berm around the spill and call Clean Harbors and the Fire Department. Mr. Bielunis said it's not directly adjacent to the soils and the area is flat; there is enough reaction time to put down absorbent materials for containment.

Ms. Guldner asked with the large variety of chemicals, how does the Fire Department know about all of them and how to treat it, is there a crossover? Mr. Bielunis said the Fire Department looks at it in terms of their flammability, combustibility, and potentially toxicity if they are going to be exposed to them. In his conversations with people at the Fire Department was told that they look at if they burn or not and are they creating hazardous conditions for the firefighters. Ms. Weiskind said there is an annual report that has to be filed and, dependent on certain thresholds, chemicals are reported to the Fire Department. The report is specifically so the Fire Department knows what they are stepping into. The Fire Department has been in their facility numerous times and approved a number of permits on their behalf. Mr. Litchfield said all the information that comes with the application is shared with the Fire Department.

Mr. Firmin had a question on the spill storage that's not in compliance with our recommendation of 100% and asked what percentage of that is the 3,000 gallons, how many are there containers that don't meet the federal mandate or Fire Department's request. Mr. Litchfield explained they all meet the federal mandate or what the Fire Department was recommending was the industry standard. There were 10 or so containers that didn't meet the 100% within each cabinet; 3 had blank boxes so he wasn't sure if they met it or not. Mr. Firmin asked of the 10, what was the percentage? Mr. Litchfield said most were close to it. Mr. Firmin said if 6 of the containers had 80% storage, the odds of having them all burst at the same time is slim. Mr. Litchfield said if the Committee is satisfied that they are meeting the industry standard and what the Fire Department is looking for, and they want to recommend approval as it is, he will be behind it.

Mr. Rogers talked about a few scenarios and felt comfortable that the formal regulations and the procedures and the containment areas protect us sufficiently. In terms of the blank items, he asked if it's

the refrigerator in the H2 bunker that's not built with spill capacity. Mr. Litchfield said the H2 bunker has capacity for everything in there; he's not overly concerned about that. Mr. Rogers asked about the two reservoirs that we don't have percentage for. Mr. Bielunis said he didn't notice if they had a plastic container around the one-gallon bottle. They can put it in a secondary container that would hold 100% or more of the volume. Ms. Capobianco felt comfortable with what they have in place.

Mr. Rogers said there is consensus among the Committee that the containment as submitted is acceptable. Mr. Litchfield has a condition around the floor drains in the bathroom areas. If it's possible to keep anything that spills on the floor in the lab area from migrating towards the floor drains physically, that seems appropriate for both the operation of the business and the welfare of the groundwater downstream, ultimately where the sewer discharges. If that's acceptable to Aspen, they can work that into a recommendation to the Planning Board. If it's something they want to look at further before committing to, he's ok with that. Mr. Gould said they need to address it and said they will look at different options. Mr. Litchfield said all he is looking for is something that will prevent a spill from getting into the floor drains. Mr. Bielunis said they don't know the solution just yet but can commit to satisfying the Committee with some type of barrier from preventing a spill from getting into the floor drains in the restrooms. Mr. Litchfield said the condition could read that they take all appropriate actions to prevent any spill from leaving the lab area. All conditions that were in the original permit will remain in full force with the exception of modifications made at the public hearing. The Committee is focusing on three conditions to modify: floor area for R&D, contingency plan update, and the list of chemicals being reduced and accompanied with the storage of each. Mr. Rogers said from this Committee would be the recommendation to add the additional condition about spills leaving the lab area.

Ms. Capobianco made a motion that the Committee recommend to the Planning Board that the following conditions be added to any approval of the project. #2, 3, & 10, and adding the recommendation about the lab area containing anything that might spill in there from leaving the lab area. Ms. Guldner seconded; roll call vote: Capobianco-yes; Guldner-yes; Firmin-yes; Ziton-yes; Rogers-yes; motion approved.

Old/New Business:

Review and Approve Minutes of May 10, 2022 – Tabled to the next meeting.

The next meeting was scheduled for October 11, 2022 at 6:00 p.m., if necessary.

Ms. Guldner inquired about a discussion that took place a few months ago over the writing of a letter that went to the Planning Board where they questioned the way it was written; she asked if that had been settled. Mr. Litchfield said there was some concern that the applicants were presenting the recommendations to the SPGA that the Committee was approving the project, and that's not the case. The GAC is an Advisory Committee; it does not approve or not approve; it makes a recommendation to the SPGA; they are the board(s) that approve it. He did not put it on the agenda tonight and felt that as long as the recommendation from this Committee to the SPGA indicates conditions that could be incorporated into any approval, takes care of it. Mr. Ziton, speaking for himself and not the Planning Board, felt that the way the motions are being worded now addresses the concerns that the board had in the past.

Having no further business to discuss, Ms. Capobianco made a motion to adjourn; Ms. Guldner seconded; roll call vote: roll call vote: Capobianco-yes; Guldner-yes; Firmin-yes; Ziton-yes; Rogers-yes; motion approved.

The meeting was adjourned at 7:30 p.m.

Respectfully submitted,
Melanie Rich
Committee Secretary