

DEQ Response to Public Comments
Regarding No Further Action Report for the
Belding Products Facility
City of Belding, Ionia County
February 20, 2015

Electrolux Home Products Inc. (Electrolux) submitted to the Department of Environmental Quality (DEQ) a request for review of a no further action report (NFA) for the Belding Products Facility in Belding, Ionia County on October 29, 2014. The NFA report documents the elements of the remedy intended to satisfy Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1995 PA 451, as amended. Those elements include:

- Excavation at the source area of contaminated soils;
- Site specific mixing zone based criteria for contaminants in groundwater discharging to the Flat River;
- An exposure barrier composed of former building foundations and facility pavement overlain by a soil and vegetative cover to prevent direct contact with the soil and groundwater on the site.
- A Restrictive covenant that will restrict the construction and use of wells/other devices to extract groundwater for consumption, irrigation, or other use; restricts actions that would interfere with or obstruct access to the existing monitoring wells, prohibits land uses that would interfere with any element of the response activities, prohibits activities that would affect the integrity of the final cover at the property, and limits the construction of buildings.
- A Monitoring, Operations and Maintenance and Oversight Plan with annual inspection of the surface soil cover with documentation of the site conditions, and a minimum of five (5) years of groundwater monitoring of the site monitoring wells, surface sample locations and groundwater elevations from all wells and piezometers;
- A Financial Assurance Mechanism to assure funding for the performance of the post closure activities.

A comment period was established to take public comments on the NFA. The public comment period was advertised as required by Section 20120d of Part 201 Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1995 PA 451, in the Greenville Daily News on November 17, 2014 as well as the DEQ calendar on the same date. Late in the public comment period the DEQ was informed by officials of the City of Belding that they were not aware of the comment period. As a result, the DEQ extended the public comment period until January 31, 2015 to provide more time for residents and city officials to provide comment. The extension of the public comment period was noticed in the DEQ calendar as well as the City of Belding Website.

The DEQ received written comments from the City on December 19, 2014. Those comments included a request for a public meeting on the NFA. The public meeting was held on January 28, 2015 at the Belding Public Schools Adult Education Building after being announced in the City of Belding Website and the DEQ Calendar. Seven citizens commented at the public meeting. This briefing report summarizes the written comments received from the City of Belding and comments accepted at the public meeting.

Comment: One commenter expressed concern with the discharge of contaminated groundwater from the aquifer underlying the Belding Products property to the Flat River (River) and the use of mixing zone-based criteria, the expected length of the discharge and if the River would be safe for recreational use.

Response: The NFA and supporting documentation demonstrates to the Department's satisfaction that use of mixing zone based criteria granted to Electrolux is appropriate and protective of public health. In the most recent sampling, the concentration of contaminants at wells along the river that represent the point of compliance are well below the mixing zone based criteria.

The DEQ reviews the remedy chosen by the submitter of the NFA document for consistency with Part 201. Section 20119 of Part 201 provides for use of mixing zone-based criteria in lieu of the generic groundwater surface water interface criteria. A mixing zone is the allocated portion of the receiving surface water body where venting groundwater discharge is mixed with surface waters. The mixing zone-based criteria are based on the maximum contaminants found at the facility, the size of the River, the amount of groundwater discharging to the river and is protective for all uses of the River.

The discharge to the river is expected to continue for an indefinite period. A groundwater monitoring program has been on-going for many years and results consistently demonstrate that contamination is decreasing at the River. That trend is expected to continue.

Comment: Both written and oral comments noted the presence of wellhead protection zones for the municipal well fields on the opposite bank of the Flat River from the facility. The commenters were concerned about potential contamination of the municipal wells and/or private water supplies.

Response: Investigations to date demonstrate to the satisfaction of the DEQ that the Flat River is acting as a hydrologic barrier and is the discharge point for aquifers on either side of the River. The most recent investigations demonstrated that contamination had not moved deeper below the property or in directions other than toward the River. The DEQ has accepted the results as satisfactory evidence that there is no underflow of the River by the facility contaminants and the municipal well field is not threatened by contamination from the site. Given the location of the facility, the discharge to the River, it is unlikely that any private water supplies are threatened.

Comment: Written and oral comments expressed dissatisfaction with the extent of the investigation particularly with respect to facility soils.

Response: A presumptive remedy as described below is allowed under the Part 201 and the DEQ is satisfied that a properly maintained cover is protective of public health, safety and welfare and of the environment.

The remedy chosen by Electrolux presumes that there is contamination in the soils below and around foundations and pavement at the facility that represents a potential threat to human health through direct contact and through inhalation of vapors migrating into buildings constructed on the facility. The proposed remedy for these exposure pathways is to cover the foundations and pavement with a soil and vegetative cover that ranges from 2 to 7 feet in depth across the facility, limitation on excavation of soil save for temporary construction performed under a soils management plan, require regular inspection and maintenance of the cover indefinitely, and require that any building constructed on the facility incorporate engineering controls to mitigate potential vapor migration into the structure.

Comment: Some comments expressed concern regarding the depth of the soil and vegetative cover at the facility which in some areas has a depth of 2 feet.

Response: The DEQ is satisfied that this cover is protective for the expected use of the facility and that legal safeguards are in place to assure its proper maintenance.

Remedies approved under Part 201 must be protective of public health. Towards this end, the DEQ evaluates the depth of any soil and vegetative cover based on the intensity of the expected activities at the facility and whether the soil and vegetative cover eliminates unacceptable risks to public health, safety, or welfare. The prospective use of the facility is for a public park, and given the size and location of the facility, the DEQ does not expect intensive uses (heavy vehicle traffic) on the facility to interfere with protectiveness of the soil and vegetative cover.

The integrity of a cover of any depth is only as effective as the maintenance program which is why the post closure agreement accompanying the NFA approval requires an operation, maintenance and monitoring plan to assure that regular inspections and maintenance is performed on the cover. Under the terms of the post closure agreement, Electrolux is required to submit an annual report which describes any activities undertaken to, among other things, ensure the integrity of the soil cover, and allowable facility uses are maintained. Finally, Electrolux is including a financial assurance mechanism that will provide funds for the State to take over operation, maintenance and monitoring of the soil cover in the event that Electrolux longer can implement the program.

Comment: Oral and written comments requested reconsideration of the post closure groundwater monitoring period. Commenters felt that demolition of the buildings may have sufficiently changed recharge of storm water at the facility that it could affect contaminant transport. Comments also requested the DEQ take a more active role in oversight to include "splitting" samples (i.e. taking samples at the same time to be analyzed at the DEQ laboratory) with Electrolux and consider performing groundwater monitoring independently of Electrolux on a different schedule.

Response: As originally proposed, the post closure groundwater monitoring period would have extended for a minimum of 2 years after which Electrolux could request a change in the frequency of monitoring or consideration of ceasing monitoring. Electrolux has agreed to extend the minimum groundwater monitoring period to 5 years beginning with the October 2014 monitoring round.

As part of its on-going oversight of the performance of the remedy for the facility, the DEQ intends to 'split' samples and perform sampling on a schedule 6 months off of the schedule Electrolux intends to maintain.