**EXPLANATION OF SIGNIFICANT DIFFERENCES**
**BULOVA WATCH FACTORY SITE**
**Village of Sag Harbor**
**Town of Southampton**
**Suffolk County, New York**
**Site No.: 1-52-139**

## 1.0 INTRODUCTION

A No Further Action Record of Decision (ROD) was issued by the New York State Department of Environmental Conservation (NYSDEC) in December 1996. The selected remedy was to continue operation of the ongoing soil and groundwater remediation system, consisting of two air sparging and soil vapor extraction (AS/SVE) systems to treat volatile organic compounds (VOCs) at the site. The purpose of this Notice is to describe the change in remedial action activities from the initial actions approved in the 1996 ROD for the Bulova Watch Factory Site. After the Department approved permanent shut down of the AS/SVE systems in 1999, results of monitoring samples indicated the presence of residual VOC contamination in soil gas, soils and groundwater. Based on these results, the Department directed Bulova to conduct additional investigation and remediation of the residual VOC contamination.

This Explanation of Significant Difference (ESD) will become part of the Administrative Record for this site. The information here is a summary of what can be found in greater detail in the following document repositories; although this is not a request for comments, interested persons are invited to contact the Department's Project Manager, Mr. Girish Desai, P.E.

NYSDEC, Region One Headquarters
SUNY @ Stony Brook
50 Circle Road
Stony Brook, NY 11790-3409
Mon-Fri: 8:30 am - 4:45 pm

John Jermain Memorial Library
201 Main Street
Sag Harbor, NY 11963
Mon - Wed: 10:00 am - 7:00 pm
Thursday: 10:00 am - 9:00 pm
Fri - Sat: 10:00 am - 5:00 pm
Sunday: 12:00 pm - 4:00 pm

## 2.0 SITE DESCRIPTION AND ORIGINAL REMEDY

The Bulova Watch Factory Site is located at 15 Church Street in the Village of Sag Harbor, Town of Southampton, Suffolk County, New York. The site is approximately 2.3 acres in size and presently contains one building. The building is a vacant one to four story brick and timber structure and contains several courtyards. The site is located within the historic district of Sag Harbor in a mixed residential/commercial setting. Bulova Corporation owned and operated the facility between 1936-1981. During this period, unknown quantities of 1,1,1-trichloroethane wastes, semi-volatile organic compounds (SVOCs) and metals were released into the environment. The primary location

of chemical and hazardous waste storage was the interior courtyard and a room adjoining that courtyard. A total of four underground storage tanks (USTs) containing fuel oil existed in the interior courtyard, south court yard and western courtyard and adjacent to the drying furnace and have been removed. The investigation and remediation of petroleum-related contamination are being undertaken by the current property owner pursuant to the NYSDEC's Spill response program. The facility has remained vacant since 1981.

**Description of Selected Remedy**

A No Further Action ROD was issued in December 1996. The ROD selected continued operation of the air sparging and soil vapor extraction treatment systems to remediate groundwater and soil contamination and monitoring of the performance of these remediation systems to ensure that the remediation goals are met. The elements of the selected remedy approved in the ROD were as follows:

- Continued operation of the ongoing soil and groundwater remediation system, consisting of two air sparge/soil vapor extraction (AS/SVE) systems to treat VOCs at the site. One system is located in the interior courtyard to remediate the source area, and the other is located in the northwest courtyard to prevent contaminants from leaving the site property. These systems will be operated until the remediation goals established for the site are achieved, or until it is demonstrated that achieving such goals is not technically practicable.

- Monitoring the performance of the remediation system to ensure that the remediation goals are met.

- Reclassification of the site from a Class 2 to a Class 4 on the New York State Registry of Inactive Hazardous Waste Disposal Sites. A Class 4 inactive hazardous waste disposal site is "a site that has been properly closed but that requires continued operation, maintenance, and /or monitoring."

## 3.0 CURRENT STATUS

The NYSDEC sent a letter, dated March 12, 1999, approving the request to permanently shut down and dismantle the AS/SVE system. The letter also strongly advised that all on-site groundwater monitoring wells not be abandoned until the site's classification status was resolved. After the permanent shut down and deactivation request was approved by the Department, additional soil gas and groundwater samples were collected to confirm remedial goals had been met for groundwater objectives and also to investigate the soil gas medium, which had not been a requirement at the time of the initial ROD approval. This additional data helped to better define the areal extent of soil gas contamination and groundwater quality in order to aid the supplemental remedial effort.

In June 1999, VOCs were identified in soil gas near the western portion of the interior courtyard. Findings of the investigation determined an area of the interior courtyard, outside the radius of

influence of the original AS/SVE system, as having high levels of VOCs in soil and groundwater. Two supplemental remedial actions were implemented in October and November 2001 and March 2002 to address the remaining VOC impacts. These actions were 1) excavation of shallow-depth VOC-impacted soils from the western portion of the interior courtyard area completed in October and November 2001; and 2) reconfiguration of the existing AS/SVE system in the interior courtyard to address the presence of VOCs in the deeper impacted soils and groundwater. The reconfigured AS/SVE system began operating on March 1, 2002 and was permanently shut down in June 2005.

Groundwater sampling indicates levels of VOCs in groundwater are at asymptotic levels since 2003. Total VOCs in a monitoring well located in the source area showed 132.5 parts per billion in June 2005. These remedial activities have reached their technological limits, and there are no other cost-effective actions available to achieve further significant reductions in residual VOC concentrations in any of the environmental media. In addition, the off-site soil gas migration is limited and vapor intrusion is not currently a concern for adjacent off-site structures. Although the remedial actions (excavation, air sparging, and soil vapor extraction) have significantly reduced the amount of contamination in the subsurface, both groundwater and soil vapor are still contaminated at the site. In January 2006, the Site was purchased by Sag Development Partners, LLC (SDP) with the intention of redeveloping the Site for residential use in accordance with the prior zoning variance obtained by Watch Case Associates (previous site owner) to permit such use on the site.

## 4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCES

As previously discussed, the results of post- remedial activities indicated the presence of residual VOC contamination in soil gas and groundwater remaining at the site after the Department approved the permanent shut down of the AS/SVE systems in June 2005. Therefore, the following additional measures are required:

- Engineering controls will be required to prevent soil vapor intrusion into above grade residential structures and to prevent direct contact with soils that present a potential exposure concern. Soils that exceed current state residential cleanup objectives may be present in the subsurface, thus excavation of soils associated with the site development process could present a potential exposure to these soils.

- An active sub-floor depressurization system will be installed above the foundation slab of the existing building as part of the ESD remedy, and will be maintained and operated in accordance with the Site Management Plan (SMP). A vapor barrier membrane will be installed over the entire sub-floor depressurization system and the vapor barrier will be covered by a slab to protect membrane integrity.

- An active sub-slab depressurization system (SSD) will be installed below the proposed garage foundation slab and soil-contact sidewalls of the proposed condominium buildings and maintained and operated in accordance with the SMP. An active ventilation system will

be operating in the subgrade garage level, between the soils and the base of the proposed condominium units to aid in mitigating any soil vapor intrusion.

- A vapor barrier will be installed between the garage roof and the floor and soil-contact sidewalls of the proposed condominium buildings and maintained and operated in accordance with the SMP.

- The garage below the proposed condominium buildings will be vented in accordance with the applicable local building codes. The garage vehicular exhaust venting system will operate at all times.

- A subslab mitigation system and vapor barrier will be installed when any future structures/buildings/pool are built at the site. Performance testing of any mitigation system, which may include indoor air quality testing, will be required inside the existing building and any future buildings on the site.

- All mitigation systems will be tested prior to residential occupation in accordance with the SMP. Active systems will need to demonstrate effectiveness at mitigating soil vapor intrusion prior to cessation of an indoor air quality sampling program.

- The existing building foundation and walls will be examined during the construction to determine if any voids/cracks are present that could present vapor migration pathways. Any voids/cracks will be grouted or properly sealed.

- A demarcation layer must be placed and maintained at the bottom of all excavations beneath all landscaped areas and above all sub-surface areas of undisturbed, regraded, or reused Site soil in accordance with the SMP. Any proposed soil excavation on the property below the demarcation layer, or below the new garage slab, or below the existing building foundation slab, will be conducted in accordance with the SMP. The excavated soil and construction wastewater must be managed, characterized, and properly disposed in accordance with the SMP. Non-landscaped areas (buildings, roadways, parking lots, etc.) will be covered by a paving system or concrete at least 6 inches thick. These actions will eliminate the potential risk of direct contact to soils that exceed residential SCG levels.

- Imposition of an institutional control in the form of an environmental easement that would require (a) limiting the use and development of the property to restricted residential use; (b) compliance with the approved site management plan; (c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (d) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.

- Development of a site management plan which will include: (a) soil gas monitoring and soil vapor intrusion management, including but not limited to, an active above-slab venting

system in the existing building to prevent soil gas intrusion into the residential spaces, installation of necessary vapor barriers in all on-site buildings and installation of a sub-slab venting system in any future buildings constructed on-site; (b) excavated soil and wastewater will be tested, properly handled to protect the health and safety of workers and the nearby community, and will be properly managed in a manner acceptable to the Department; (c) monitoring of soil gas, groundwater and indoor air; (d) vegetable gardens are prohibited; (e) detached single family homes are prohibited; (f) any proposed soil excavation on the site will be conducted in accordance with the SMP; (g) the garage vehicular exhaust venting system and the existing building active sub-floor depressurization system must operate all times; and (h) provisions for the performance monitoring and continued proper operation and maintenance of the sub-slab depressurization systems, including any required post-installation indoor air quality sampling.

- The property owner would provide a periodic certification of the institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; b) allow the Department access to the site; and c) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

## 5.0 SCHEDULE AND MORE INFORMATION

The December 1996 ROD, October 2006 Final Remedial Action Report (RAR), and March 13, 2007 Addendum to the Final RAR, contain all of the results of all remedial activities at the site and are available at the local document repositories. This Explanation of Significant Differences will be placed in the document repository and will be mailed to all persons on the site mailing list. The environmental consultant for the responsible party and the site owner has submitted a draft site management plan to the NYSDEC that details all Institutional Controls/Engineering Controls (ICs/ECs) related activities. In accordance with the Department's approved site management plan, these ESD site activities will be implemented.

6/13/07
Date

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