

ITEM 5

Environmental Health & Impact Statement

ITEM 5

**SOLID WASTE FACILITY PERMIT RENEWAL APPLICATION
STERICYCLE MEDICAL WASTE TREATMENT AND TRANSFER FACILITY**

**75 CROWS MILL ROAD
KEASBEY, MIDDLESEX COUNTY, NEW JERSEY**

ENVIRONMENTAL HEALTH & IMPACT STATEMENT



REPORT

Environmental and Health Impact Statement

*Application for Solid Waste Facility Permit Renewal
Stericycle Medical Waste Treatment and Transfer Facility
Woodbridge Township, Middlesex County, New Jersey*

Submitted to:

Stericycle, Inc.

2355 Waukegan Rd.
Bannockburn, IL 60015

Submitted by:

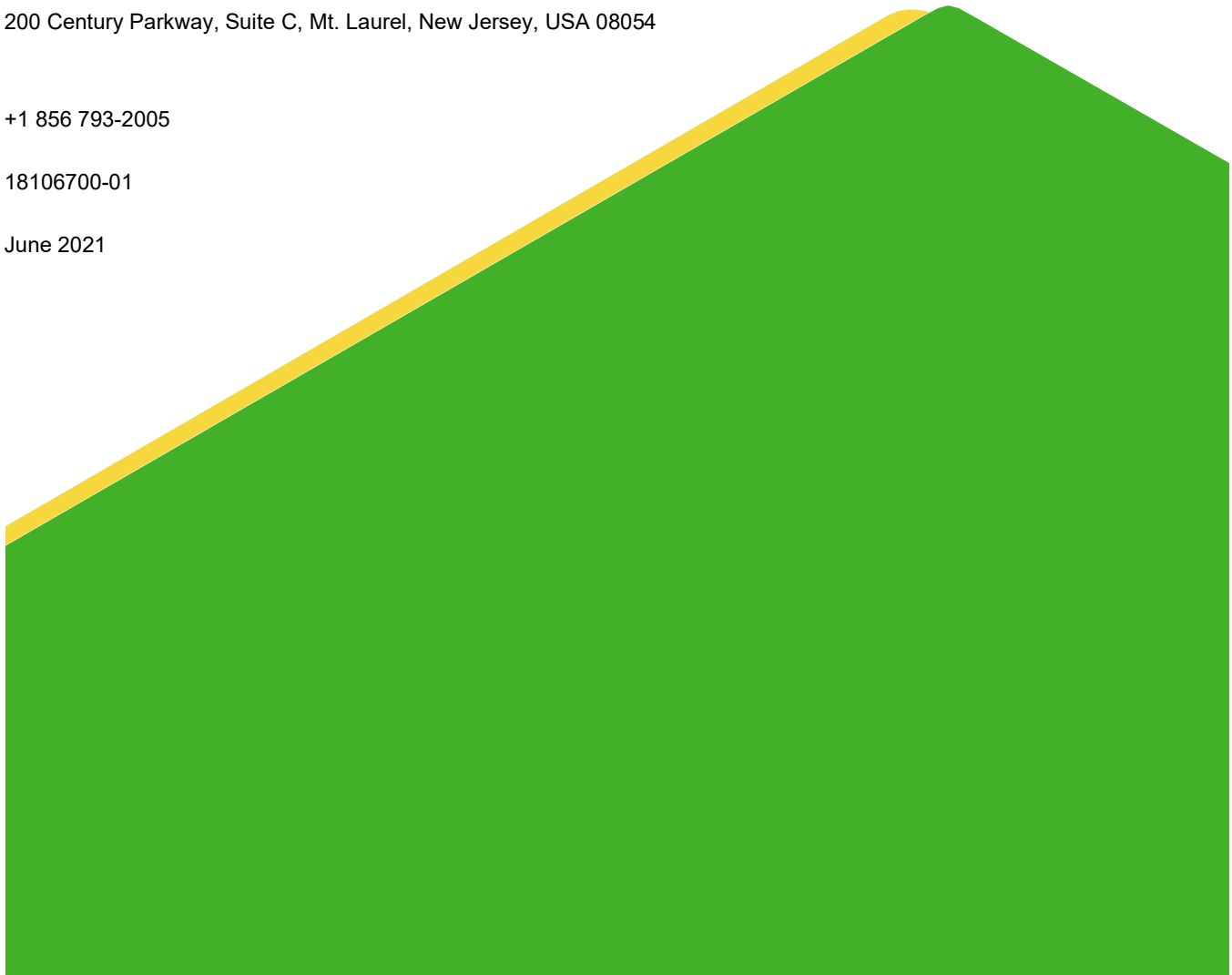
Golder Associates Inc.

200 Century Parkway, Suite C, Mt. Laurel, New Jersey, USA 08054

+1 856 793-2005

18106700-01

June 2021



Distribution List

1 Copy - New Jersey Department of Environmental Protection

1 Ecopy - Stericycle, Inc.

1 Ecopy - Golder Associates Inc.

Table of Contents

- 1.0 INTRODUCTION 1**
- 2.0 FACILITY OPERATIONS 1**
 - 2.1 Volume of Waste to be Handled 1
 - 2.2 Methods of Handling 1
 - 2.3 Facility Layout and Operations..... 2
 - 2.4 Disposal..... 3
- 3.0 SITE LOCATION..... 3**
 - 3.1 Site Location and Legal Description 3
 - 3.2 Vicinity Characteristics 4
- 4.0 ENVIRONMENTAL IMPACT OF FACILITY 4**
 - 4.1 Local Transportation Patterns 4
 - 4.2 Surface Water and Groundwater Quality 4
 - 4.3 Ecological Resources 5
 - 4.4 Stormwater/Wastewater Supply Capacity..... 5
 - 4.5 Water Supply Capability 5
 - 4.6 Air Quality..... 6
 - 4.7 Ambient Acoustic Conditions 6
- 5.0 COMPLIANCE WITH EXISTING DISTRICT POLICIES..... 7**

APPENDICES

APPENDIX A

Alternative Medical Waste Disposal Technologies Authorized in New Jersey

APPENDIX B

New Jersey Pollutant Discharge Elimination System (NJPDES) Permit

APPENDIX C

Approval of Fire Control Plan

1.0 INTRODUCTION

Stericycle, Inc., a Delaware Corporation (Stericycle), specializes in the collection, treatment and disposal of medical waste, and recalled and expired medical products. Stericycle services both the large-quantity regulated waste generators, such as hospitals and pharmaceutical manufacturers, and the small-quantity generators of regulated waste, which include outpatient clinics and medical and dental offices. In an effort to better serve their customers in New Jersey and subsequent areas, as needed, Stericycle is looking to establish a regulated medical waste treatment and transfer facility.

Stericycle plans to develop a regulated medical waste (RMW) treatment and transfer facility (Facility) on property owned by Recycling Technology Development, LLC, holding company of the Bayshore Recycling Corp family of companies (hereafter referred to as “Bayshore”) in Woodbridge, New Jersey. The Facility is currently under construction and anticipated to commence operation in late 2021. Stericycle is looking to renew the existing Solid Waste Facility Permit (RMF130001) issued by the New Jersey Department of Environmental Protection (NJDEP) for the operation of the facility. A permit renewal application is being submitted to NJDEP for the RMW facility on a parcel of land currently owned by the Montecalvo Disposal Services Incorporated (MDS) in Keasbey, located in Woodbridge Township, Middlesex County, New Jersey (Site).

This Environmental and Health Impact Statement (EHIS) has been developed to supplement the permit application to the NJDEP.

2.0 FACILITY OPERATIONS

2.1 Volume of Waste to be Handled

The source/origin of the materials will be RMW generated from hospitals, doctors’ offices, dentists, medical labs, blood banks, veterinarians, etc. It is anticipated that the volume of waste material to be handled at the Facility will not exceed 150 tons per day. If the tonnage from Middlesex County is less than 150 tons per day, the facility may accept RMW from other localities that might need assistance in finding an appropriate, environmentally sound disposal facility. The types and quantities of RMW materials transported to the Facility for treatment will vary from day to day as market conditions change, and contracts are approved with generators.

Stericycle plans to accept into their Facility all seven (7) classes of RMW that will include: cultures and stocks (Class 1), pathological wastes (Class 2), human blood and blood products (Class 3), sharps (Class 4), animal waste (Class 5), isolation wastes (Class 6) and unused sharps (Class 7) as defined in N.J.A.C. 7:26-3A.6(a). However, Stericycle does not plan to treat Class 2 Pathological Waste, Class 5 Animal Waste or non-hazardous pharmaceuticals waste in the proposed facility. Those materials would be segregated and handled separately from the main waste stream and transferred from collection vehicles to transport vehicles for final disposal at approved incineration facilities contracted by Stericycle. The RMW may be retained in a transportation vehicle for up to 14 consecutive calendar days provided the waste does not become putrescent or emit any odors.

2.2 Methods of Handling

The management of RMW in New Jersey is regulated under the detailed requirements of N.J.A.C. 7:26-3A.1 which includes specifications for vehicle markings, handling and packaging, paperwork provisions through use of a tracking form and treatment and destruction provisions.

The incoming transport vehicles are primarily owned by Stericycle with supplemental coverage by third party carriers. Vehicles will be clearly labeled as containing RMW, as required. Upon passing through a gate at the

entrance to the facility, the transport vehicles will be parked in the parking area. At that time, the driver will either move the transport vehicle with the RMW to the unloading area for acceptance or will leave the transport vehicle staged in the parking area.

The RMW material will be packaged per NJDEP and New Jersey Department of Transportation (NJDOT) regulations. Most containers will arrive in the transport vehicles. Each container will be inspected at the weigh scales. Some packaged waste will arrive in roll-off containers. The preliminary inspection of materials will ensure that all employees/individuals working at the facility will not come into physical contact with any waste. The facility will also review the required tracking form to check for completeness. If the containers are secure and the transport paperwork is accurate, the RMW will be weighed, and logged.

Following logging, the containers will be moved into the waste management and treatment area where it will be staged for treatment. The treatment process of the RMW will employ a Bondtech BTT autoclave for steam sterilization prior to offsite disposal. Bondtech BTT equipment was previously approved for its effectiveness and received an "Alternative or Innovative Technology Authorization" from the NJDEP and Department of Health and Senior Services (DHSS) pursuant to N.J.A.C. 7:26-3A-47. Stericycle will comply with the conditions and operating requirements required by the NJDEP and DHSS in the authorization letter from the NJDEP for the use of Bondtech autoclaves to be used for the treatment of RMW (see Appendix A).

Due to the transport, and treatment process occurring in a building, it is not anticipated that there will be any noise, odor or litter concerns that may impact the surrounding area or local environment.

Upon completion of the treatment process, the RMW is effectively reduced in volume, and the waste/residue becomes non-infectious. The remaining residue is considered a treated medical waste under New Jersey law, which will be transported to a permitted disposal facility.

2.3 Facility Layout and Operations

All operations will occur inside a newly constructed, approximately 51,000-square foot building to be located on a portion of the Montecalvo Disposal facility site. The layout of the proposed treatment and disposal facility is shown on Figure 11 of Appendix A contained within the Engineering Design Report (EDR), Item 6. The main access to the proposed RMW facility will be from Crows Mill Road.

The facility is easily accessible from the Garden State Parkway, New Jersey Turnpike, Routes 440, 287, 35, 9, 1 and the Outerbridge Crossing. Local roads, such as Smith Street, Crows Mill Road and Industrial Way are also active trucking routes used to access the facility. As noted previously, access to the Facility will be via Crows Mill Road.

During the processing of trucks, truck drivers will be required to submit their documentation to the appropriate employee. A copy of the tracking form is to accompany each shipment of RMW, from the generator to the treatment facility. The shipping documents will be reviewed and checked for accuracy prior to their treatment. Upon acceptance, the shipping documents will be signed to certify that the RMW was received by the facility.

Once the proper signatures are obtained on the shipping documents, the waste will be removed from the transport vehicles and placed in the waste management and treatment area within the building as shown on Figure 6 in Appendix A of the EDR, Item 6. This area will be the staging area for received medical waste prior to segregation and treatment. Stericycle recognizes the NJDEP regulations regarding the segregation, packaging, labeling,

tracking, transportation, handling, treatment, destruction and recordkeeping requirements of RMW, and will follow accordingly so there will be no negative impact to staff, facility, site, or surrounding community.

The majority of the generators of the RMW are provided separate containers by Stericycle for the separation of the varying types of RMW generated in their facilities. The segregation of the RMW material at the point of generation minimizes the sorting and handling of the RMW at the proposed RMW facility. The type of waste material will be identified by a label or the container/package it resides in. After the RMW is offloaded, the waste will be sorted according to the treatment path it will take. Each container will be weighed and scanned for radiation. If any of the received waste is not suitable for treatment with the autoclave process, the materials will be temporarily staged, either within the building or in designated transport vehicles and await transport off-site for treatment and disposal.

The RMW will be placed in approximately 42 autoclave bins that will be conveyed to the autoclaves by a shuttle car and conveyor system. The shuttle car is able to hold 6 autoclave bins. The simultaneous operation of the three (3) autoclaves will allow for the continual processing of RMW material. After treatment, the waste is considered disinfected and the autoclave bins with the post treated waste will be removed from the autoclave units and moved by the shuttle car and conveyor system to the compactor. The compactor will move the post treated waste into a walking floor trailer. The walking floor trailer will be transported offsite for disposal.

Because the RMW will be transported to the Facility on paved roads and directly into the treatment building at the Facility, there will be no contact with soil, waste or residue on the truck tires; therefore there will not be a necessity for a wheel wash at the proposed facility.

2.4 Disposal

It is anticipated that wastewater will be generated during the treatment and washing processes and the normal hygiene activities within the proposed Facility. Any water to be disposed of will be directed to the existing onsite sewer system managed by the Middlesex County Municipal Utility Authority. The RMW that is treated in the autoclave process will result in treated medical waste that will be transported a disposal facility permitted to handle the waste.

3.0 SITE LOCATION

In accordance with N.J.A.C. 7:26-2.9(d)1(ii), a description of the site location of the proposed Facility must be furnished. Maps showing the Site and the surrounding area is shown on Figure 7 (Vicinity Map) in Appendix A of the EDR, Item 6.

3.1 Site Location and Legal Description

The proposed Facility will be located within the 52-acre Eco-Complex and Energy Park located in Keasbey (Woodbridge Township), Middlesex County, New Jersey that is operated by Bayshore. The street address of the complex is 75 Crows Mill Road, and is accessible from Route 440 and Smith Street to Crows Mill Road. The Complex is identified as Block 51, Lots 1.02, 2, 2.01 and 2.03; and Block 41.03, Lots 1.012, 3.02, 4.01 and 4.02 on the Tax Map of the Township of Woodbridge.

Stericycle's facility includes a 51,000 square foot building located in the northerly portion of the complex on approximately 6.3 acres of land. The location of the proposed facility is shown on Figure 1 in Appendix A of the EDR, Item 6, with the center of the property being located at approximately North 40° 30' 54" Latitude and West 74° 18' 28.15" Longitude. The proposed structure will house both the manufacturing area and offices. The Facility

will be surrounded by bituminous concrete pavement, and the areas beyond the pavement will consist of other buildings and structures associated with the Bayshore operations.

3.2 Vicinity Characteristics

The proposed RMW Facility is located within the Bayshore Eco-Complex and Energy Park that is zoned “M-2 Heavy Industrial Zone.” The southern-most section of the Bayshore property abuts the Raritan River. There are no residential areas in the general vicinity of the Bayshore Eco-Complex. The property is surrounded by a chain link fence on three sides and is bordered by the Raritan River on the fourth side.

4.0 ENVIRONMENTAL IMPACT OF FACILITY

In recognition that the NJDEP does not have established regulations for a large-scale thermal destruction facility, the requirements for a small-scale facility will be followed in accordance with N.J.S.A. 7:26-2.9(d). It is required that the EHIS contain a description of the impact that the proposed facility will have on local transportation patterns, drainage characteristics, surface and ground water quality, endangered and/or threatened wildlife and vegetation, storm water and wastewater collection treatment capability, water supply capability, air quality and ambient acoustic conditions. Because the proposed facility will be a new construction, all of the above referenced areas of concern (AOC) are to be addressed.

As previously stated, the proposed facility will be constructed within the footprint of the fully operational Bayshore Eco-Complex and Energy Park. It is not anticipated that the addition of the proposed RMW facility will create any larger impact to the environment than the active complex is currently providing.

4.1 Local Transportation Patterns

The local transportation pattern in the area of the complex has been previously established for this heavy industrial zone. The facility is easily accessible from the Garden State Parkway, New Jersey Turnpike, Routes 440, 287, 35, 9, 1 and the Outerbridge Crossing. The established local roadways, including Smith Street, Crows Mill Road and Industrial Way are active trucking routes used to access the facility. As noted previously, vehicular traffic will access the site via Crows Mill Road. These access driveways will provide the ability to exit the facility.

The Middlesex County Solid Waste Management Plan authorized the approval of the proposed operation of the RMW facility seven (7) days a week, twenty-four (24) hours per day. At full operation, it is anticipated that there will be approximately 46 vehicles delivering RMW to the facility each day. The timing and quantities for the deliveries will be dependent on customer contracts obtained by the facility, in addition to roadway conditions.

It is not anticipated that the proposed Stericycle facility will have any adverse environmental or health impact on existing transportation patterns within the facility or the surrounding road system. Although the proposed facility will be receiving a capacity of approximately 46 vehicles per day, the existing road system will be able to handle the traffic and the impacts will be negligible due to the location of the facility in a heavily industrialized area and the nearby major roadway network. Therefore, this AOC is considered “non-applicable.”

4.2 Surface Water and Groundwater Quality

The Bayshore Eco-Complex is situated on the Raritan River, and is crossed by a tributary leading to the Raritan River, known as Kinsey Creek. There will be no direct discharge to the surface water bodies from the process operations of the facility. Outside vehicle parking will take place on existing paved surfaces. The surface stormwater drainage flow moves in the direction of Kinsey Creek that has a vegetated buffer zone within the Kinsey Creek Drainage Easement. The vegetated buffer runs along both sides of Kinsey Creek, of varying width

throughout its length along the waterway that has been established to minimize direct stormwater flow to Kinsey Creek (see Figure 8 in Appendix A of the EDR, Item 6). The proposed operations will be incorporated into the existing stormwater permit for the broader Bayshore facility operations (New Jersey Pollutant Discharge Elimination System (NJPDES) permit no. NJG0132209-RF (PI ID#46102) (see Appendix B). There will be no discharge of wastewater into Kinsey Creek.

There will be no discharge to groundwater from the facility since all operations, including RMW processing and treatment, will occur inside the newly constructed 51,000 square foot building structure. The proposed facility, including the outside vehicle parking and holding areas will be housed on impervious paved surfaces, so there will be no adverse environmental or health impacts to groundwater quality.

Therefore, this AOC is considered “non-applicable.”

4.3 Ecological Resources

The treatment of the RMW received by the proposed facility will be performed within an enclosed building within an established, highly industrial area. The proposed facility is located within the Bayshore Eco-Complex that consists of urban impacted lands with approximately 95% of the land area (not including property that is part of the Raritan River and Kinsey Creek) covered with industrial buildings, bituminous pavement or crushed stone. There is a minimal amount of plant growth located along the property boundary fences and along the banks of Kinsey Creek, but the vegetation is predominately of low quality. Due to the area being designated as a highly industrial zone, there is no significant plant or animal life in the area, or on the proposed property. The NJDEP National Heritage Program has no record of rare or endangered species or adequate habitat for rare or endangered species on the Bayshore property. Due to the classification of the property as being within a heavy industrial zone, with no significant plant or animal life on the property, this AOC is considered “non-applicable.”

4.4 Stormwater/Wastewater Supply Capacity

As previously noted, all operations associated with the proposed RMW facility will occur inside a fully enclosed building on the Bayshore site. The existing paved surfaces of the Bayshore site will provide outside vehicular parking for the proposed facility. The proposed facility will not place a significant impact to the existing stormwater management on the site due to the existing impervious ground surface (i.e., buildings, bituminous pavement and crushed stone). The surface water runoff from the Bayshore site that flows to Kinsey Creek travels through a vegetated buffer zone that runs along the banks of Kinsey Creek.

It is expected that the wastewater generated from the proposed facility will be from the treatment process, tub/container washer, restrooms, and the lunchroom. The estimated volume of generated wastewater is 34,000 gallons per day (gpd) that will be discharged to the Middlesex County Utilities Authority (MCUA) publicly owned treatment works. Stericycle previously obtained a Treatment Works Approval (TWA) No. 19-0349 issued October 10, 2019 by the Division of Water Quality, Bureau of Construction and Connection Permits for the discharge of generated wastewater. As construction is anticipated to conclude following the expiration of the TWA, Stericycle is in the process of obtaining an extension.

4.5 Water Supply Capability

The water supply for the Bayshore facility is currently provided by the Middlesex Water Company. Stericycle anticipates a consumption of approximately 34,000 gallons of water per day (gpd) for the operations of its proposed facility. Based on communication between Stericycle and the Middlesex Water Company, it is

understood that the available water supply capacity is 90 million gallons per minute (MGM), indicating that an ample public water supply is available to service the Stericycle operation.

With respect to fire suppression systems that require a water supply, there are currently three (3) fire hydrants located on the Bayshore property. A fire control plan was submitted to the Woodbridge Fire District #4 - Keasbey, for inclusion of the proposed facility, which was approved on June 4, 2019 (see Appendix C). If necessary, the Raritan River could also be used as a source of water to extinguish any fires onsite.

4.6 Air Quality

No adverse environmental or health impacts to the outdoor air quality are expected due to the operations of the Stericycle facility being performed indoors. There will only be three (3) stationary points within the facility that may have the potential for emissions. They include the proposed two (2) natural gas boilers, three (3) Bondtech autoclave units and one (1) gas-fired washer. The treatment process within the autoclave units will be performed on the waste at temperatures that are high enough to inactivate microbiological organisms, but not to a level where harmful by-products are created. The autoclave units will not achieve a temperature high enough to melt plastic materials, which would trigger emissions of volatile organic compounds (VOCs).

Stericycle had previously submitted a Readiness Checklist for the Bondtech autoclaves to the NJDEP's Division of Air and Hazardous Materials Enforcement during a pre-application meeting with the NJDEP on July 12, 2012. Upon their review, the Air Quality Permit Program determined that pre-construction permits would be required for the operation of the autoclave units pursuant to N.J.A.C. 7.27-8.2(b). Stericycle's current Air Quality Permit (Permit ID PCP 140001) is effective through September 24, 2024.

With respect to the natural gas boilers at the proposed RMW facility, during the previously stated pre-application meeting with the NJDEP, Stericycle was advised by the Bureau of Air Permits, Air Quality Permitting Program that a self-executing permit, designated as a General Permit For Natural Gas Boilers will be required to be submitted to the NJDEP for documentation, but would not require review by the NJDEP. This General Permit was completed and submitted electronically by Stericycle pursuant to the procedures outlined at the DEP website at: <http://www.nj.gov/dep/aqpp/gp.html> for "Boiler(s) & Other Indirect Fired External Combustion Equipment [\geq 10 MMBTU per hour & $<$ 50 MMBTU per hour]."

The mobile source emissions are identified as those being emitted from vehicular traffic. It is recognized that there will be a relatively small number and variety of vehicles that will access the proposed RMW facility on a daily basis. During peak operation, it is anticipated that there will be approximately 46 vehicles delivering RMW to the proposed facility each day, thus Stericycle anticipates mobile source air emissions to be negligible for the site and for the small residential neighborhood and delicatessen located within approximately $\frac{1}{2}$ mile of the facility, which are the nearest sensitive receptors.

4.7 Ambient Acoustic Conditions

The State of New Jersey has adopted regulations for Noise Control as found at N.J.A.C. 7:29. These regulations govern the enforcement of the Noise Control Act of 1971 for the control and abatement of noise. The State Noise Control Regulations are found at and provide the benchmark for "maximum permissible octave band sound pressure levels in decibels" for daytime and nighttime noise, by land use category. Existing operations at the Bayshore Recycling Corp facility fall below the maximum 96 dB (outdoor) and 86 dB (indoor) levels for a heavy industrial/commercial facility.

Also, as noted previously, The Bayshore property is zoned as an M-2 Heavy Industrial Zone, and the adjoining properties are also engaged in commercial and industrial operations. The adjoining owners include Lefcourt Associates LTD transportation companies (Alliance Shippers, Inc.; Direct Shippers Association, Inc./ Direct Coast to coast, LLC; Selective Transportation Corp; and Gotham Distribution Corp) and the Woodbridge Township Department of Public Works building and yards. The southern-most section of the Bayshore property abuts the Raritan River. Outside of this heavy industrial zone, the nearest sensitive receptor is a small residential neighborhood and delicatessen located approximately ½ mile across the heavily traveled Smith Street. There are no additional residential areas in the vicinity of the Bayshore Eco-Complex.

Stericycle had an industrial hygiene survey performed by the Hartford Loss Control Department in April 2012 at the Stericycle plant in Lake City, Georgia to assess the potential for occupational noise exposure within their building structure. This Stericycle plant has similar operations and processes as the proposed RMW facility, which include loading, washing, and an autoclave system. The results of the survey presented that none of the monitored exposures were in excess of OSHA's Hearing Conservation Limit which requires a Hearing Conservation Program (HCP), and none of the monitored exposures were in excess of the OSHA PEL of 90 dba.

All operations and secondary equipment associated with the treatment of the RMW are contained inside the building structure and is not expected to adversely affect the acoustic conditions within or surrounding the facility. The autoclave units will operate at a level of noise emission that will not require workers to wear hearing protection, although hearing protection is available, if requested. Therefore, this AOC is considered "non-applicable."

5.0 COMPLIANCE WITH EXISTING DISTRICT POLICIES

According to N.J.A.C. 7:26-2.9(d)1(iv), it is required to discuss whether the proposed facility is consistent with the existing solid waste management district policies and solid waste management plans of those districts that will be affected by the proposed facility.

Authorization and approval were received from the Middlesex County Board of Chosen Freeholders on February 6, 2003 to accept and process RMW at the proposed facility under the Middlesex County Solid Waste Management Plan. Approval from the NJDEP was received on June 24, 2003. On October 20, 2010, a request for an amendment to the Solid Waste Management Plan was submitted by Bayshore to address items including, but not limited to, increasing the capacity of its previously approved medical waste facility from 50 tons per day (TPD) to 150 TPD, in addition to modifying the location of the proposed facility on the Bayshore site. In a letter dated December 8, 2010, the NJDEP granted approval of the amendment, and the Middlesex County Division of Solid Waste Management issued a letter on December 14, 2010 approving the amendment.

On June 12, 2012, Bayshore received approval from the Middlesex County Solid Waste Advisory Council (SWAC) to authorize Stericycle as the facility operator of the proposed RMW facility. In addition, on September 12, 2012, the Middlesex County SWAC approved clarification within the Middlesex County Solid Waste Management Plan of the proposed facility treatment and transfer activities. Refer to Appendix E of the EDR, Item 6, for various approvals on the Solid Waste Management Plan.

During the operation of the proposed facility, Stericycle will implement a specialized software system for the tracking, recordkeeping and reporting of the RMW within the facility in accordance with State regulations. Tracking and reporting information will be formatted and sent to NJDEP, the Middlesex County Division of Solid Waste Management and any other agencies required to receive such information.