

(BMPs) in accordance with DEP Guidelines, a replication plan and a maintenance plan. The Commission issued an Order of Conditions (OOC) on the NOI, dated April 13, 1999. BRT has submitted two versions of a second NOI for the purpose of excavating gravel from the southwest portion of the site to fill the area approved for development in the April 13, 1999 OOC. The NOI included stormwater controls and their design calculations for the excavation area. The NOI also applied for the construction of a wildlife enhancement pond along the perennial stream and the removal of asbestos that remained from demolition of the drive-in movie screen, by others. In an OOC, dated April 25, 2000, the Abington Conservation Commission approved the asbestos removal operation but denied the construction of the wildlife enhancement pond and gravel excavation work in the buffer zone. ATS has appealed the Commission's denial of the gravel removal work and requested a Superseding Order of Conditions from DEP. In the mean time BRT has offered to remove the asbestos immediately, under DEP's guidance.

Stormwater and sediment control facilities will be constructed in accordance with BRT's Notice Of Intent and Order of Conditions. The designs that have been approved by the Abington Conservation Commission include structural Best Management Practices (BMPs) recommended in DEP's Stormwater Management Policy. BMP components include hooded catch basins, water quality swales and sediment forebays. Unlike the ATS stormwater and sediment control system, which is piped together to discharge through a single water quality treatment system of ponds, the BRT system is a series of smaller independent BMPs. These BMPs receive stormwater runoff from discrete areas of the BRT site and discharge to multiple (seven) upland locations adjacent to wetlands.

Stormwater Management Standards

The DEP Stormwater Management Policy includes nine Stormwater Performance Standards (Standards). The Standards were established to provide clear and consistent guidelines for stormwater management projects. The Standards address both water quantity and quality by establishing a level of required controls which can be achieved through site planning processes, non-structural measures and the use of Best Management Practices (BMPs).

Each of the Standards was evaluated for its applicability to the ATS and BRT sites and the stormwater and sediment control facilities were designed to conform to these standards. Each of the Standards is addressed below.

- 1. No new stormwater conveyances (outfalls/discharges) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.**

All new stormwater discharges from the ATS and BRT sites shall be treated by the proposed facilities. Storm flows from paved and building roof areas of the ATS site will be collected by a system of deep sump catch basins which will discharge to a sediment fore bay and then to a sedimentation basin which will have both a wet (retention) pond and a detention pond component. The existing drainage system for the eastern portion of the ATS site, along

Route 18, will not be modified in any significant manner and thus this Standard is not applicable to these existing facilities. Storm flows from paved and building roof areas of the BRT site will be collected by a system of independent catch basins, sediment forebays and water quality swales.

2. **Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.**

Calculations of peak stormwater runoff rates for the combined ATS and BRT properties, for pre-development (existing) and post-development (proposed) conditions are presented in each of the NOIs in Appendix D of the EIR. These calculations demonstrate that the proposed stormwater control facilities will mitigate peak run-off flow rates for post-development conditions to rates that are less than pre-development conditions. Peak influent flow rates to the wetlands on the BRT property are summarized below.

PEAK FLOW RATES IN CUBIC FEET PER SECOND (cfs)						
	PRE-DEVELOPMENT			POST-DEVELOPMENT		
STORM EVENT	ATS	BRT EAST	BRT WEST	ATS	BRT EAST	BRT WEST
2 Year	7.13	18.9	0.86	4.54	13.9	0.18
10 Year	12.40	43.7	2.69	5.98	28.7	2.41
100 Year	20.22	90.0	6.08	7.82	51.2	5.91
9 In. - 24 Hr.	28.92	136.0	10.36	22.24	66.0	9.84

3. **Loss of annual recharge to ground water should be minimized through the use of infiltration measures to the extent practicable. The annual recharge from the post-development site shall approximate the annual recharge from the pre-development or existing site conditions, based on soil types and cover.**

Proposed stormwater control facilities at the ATS and BRT sites will include components that are intended to replace annual recharge to the groundwater for areas that will be developed with impervious surfaces, to the extent practicable. The proposed ATS sediment forebay and the sedimentation pond will include wet pond, or standing water components. The wet ponds will provide a means for infiltration to the groundwater. The sediment forebays and water quality swales on the BRT property will also provide infiltration capacity to recharge the groundwater.

In accordance with the Standards, the on-site soils of the ATS site are primarily Scituate soil types, which are within the Hydrologic Group "C". For a site with Hydrologic Group C soils the target infiltration rate for an average storm is 0.10 inches of runoff. For the approximate

88,000 square feet of impervious area that will be added by the ATS project, a volume of approximately 730 cubic feet of water should be infiltrated, if practicable. The sedimentation pond is designed to receive pretreated runoff from the sediment forebay to a wet pond of approximately 6,600 square feet of surface area and a depth of three feet. Under these conditions, approximately 1.3 inches of water will have to infiltrate to match the loss of permeable surface area. Once the site has been stabilized the pond should be able to infiltrate this volume over a reasonable period of time (one week) following a storm event.

The soils on the BRT property are indicated to be a variety of Deerfield (a Hydrologic Group "B" soil), Essex (Hydrologic Group "C"), Scarboro (Hydrologic Group "D") and "Made land" (no Group designation). Assuming an average Hydrologic Group "C" characteristic, the approximate 110,000 square feet of developed impervious area will produce a volume of approximately 920 cubic feet of water should be infiltrated, if practicable. There are five water quality swales that are designed to receive pretreated runoff from the sediment forebays or deep sump catch basins. These water quality swales comprise a cumulative area of approximately 6,500 square feet of surface area. Under these conditions, approximately 1.7 inches of water will have to infiltrate to match the loss of permeable surface area. Once the site has been stabilized the swale should be able to infiltrate this volume over a reasonable period of time (one week) following a storm event.

Additionally, the groundwater, which is recharged across the two sites by infiltration, ultimately discharges to the wetlands which is included in the BRT site, which is where the collected and treated stormwater runoff will also be discharged. Since no other water resource is affected and since the water that infiltrates to the groundwater will end up in the same resource area, there is no net impact to the concerned resource area. Consequently, the intent of the Standard, to "provide base flow to streams and wetlands" is achieved.

4. **For new development, stormwater management systems must be designed to remove 80% of the average annual load (post-development conditions) of Total Suspended Solids (TSS). It is presumed that this standard is met when:**
- (a) **Stormwater management best management practices (BMPs) are sized to capture the prescribed runoff volume,**
 - (b) **Stormwater management BMPs meet the technology requirements set forth in the guidance document, and**
 - (c) **Stormwater management BMPs are maintained as designed.**

Under the Applying the Stormwater Management Policy section of the Performance Standards (page 1-14):

"To determine the runoff volume to meet the Standards for water quality, the following calculations must be used:

- 1.0 inch of runoff x total impervious area of post-development site for discharges to critical areas; and

- 0.5 inch of runoff x total impervious area of post-development project site for all other resource areas.”

Since there are no critical (ORWs, shellfish growing, etc.) areas in the vicinity of either of the two sites, the volume of stormwater that is to be treated will be calculated as 0.5 inches of runoff times the total impervious area of the project sites. The stormwater and sediment control basins on the ATS site have been designed to contain greater than two inches (>2") of runoff from the pond's tributary areas, within the wet pond capacity of the basin. Consequently, the ATS stormwater control system is providing more than four times treatment volume required by the DEP standards. The water quality swales on the BRT property have designed capacity to capture runoff of approximately 0.7 inches.

BMPs that will be incorporated into facilities and their operation include: sweeping the pavement; hooded catch basins with deep sumps; sedimentation traps (forebays); water quality swales and an extended detention pond with a wet (retention) pond component. DEP has developed a standard methodology for calculating TSS removal rates. This methodology has been applied to the proposed ATS and BRT facilities, with a resultant calculated TSS removal rate of approximately 90% and 80%, respectively.

5. **Stormwater discharges from areas with higher potential pollutant loads, referred to as "hot spots", require the use of specific stormwater management BMPs listed for "hot spots" in the guidance document, and the use of infiltration practices without pretreatment is prohibited.**

Areas where solid waste handling operations are conducted are considered to be "hot spots" and relevant BMPs should be used for source reduction and adequate treatment of stormwater runoff from these areas. Since all handling of solid waste is to be conducted inside of the proposed building on the ATS site, higher potential pollutant loads are not likely to be exposed to stormwater runoff. However, the BMPs that are to be incorporated into the ATS project, as described above, are appropriate to the application of sites with higher potential pollutant loadings, thus compliance with this Standard will be achieved, even though this Standard is not applicable. Other BMPs will also be used on the ATS site to assure the separation of stormwater and solid waste. Drippings, floor wash and truck wash water will be collected in a closed system, for proper disposal. Additionally, the ATS facility will be regularly inspected by an independent engineer, in accordance with DEP's Solid Waste Regulations. These BMPs, which are specific to solid waste transfer station operations, along with the structural BMPs that are proposed for control of the site's runoff and sediment, demonstrate that ATS will comply with this standard.

There will be no "hot spots" created by the proposed use of the BRT property, nor are there any current "hot spots" on the BRT property. This standard does not apply to the BRT site.

6. **Stormwater discharges to critical areas with sensitive resources (Outstanding Resource Waters (ORWs), shellfish beds, swimming beaches, cold water fisheries and recharge areas for public water supplies) must utilize stormwater management BMPs listed for "sensitive areas" in the guidance document to meet and maintain water quality goals.**

Surface water discharges from the ATS and BRT sites are not toward an ORW area. This aside, the structural BMPs which are proposed for the sites conform to the requirements of this standard.

7. **Redevelopment of previously developed sites must meet the stormwater performance standards to the extent practicable. However, if it is not practicable to meet all the standards, new stormwater management systems must be designed to improve existing conditions.**

The proposed operation of a solid waste transfer station at the ATS site and a vehicle storage and maintenance facility on the BRT site do not constitute redevelopment projects, thus this standard does not apply to these projects.

8. **Erosion and sediment controls must be implemented as part of a "construction phase" erosion and sediment control plan for construction or land disturbance activities.**

"Construction phase" activities at the ATS and BRT sites will include site grading and building construction of the transfer station and vehicle maintenance garage, respectively. During the construction phase, non-structural BMPs will be utilized to mitigate possible short term sedimentation. These temporary non-structural BMPs will include the use of double row haybales around areas that are to be excavated or filled and subsequent to stabilization of these areas with pavement or vegetation. These non-structural BMPs have already been installed on the BRT property, in accordance with the April 13, 1999 Order of Conditions. These measures are intended to reduce sediment loadings to wetlands and, where possible, to the structural BMPs.

9. **All stormwater management systems must have an operation and maintenance plan to ensure that systems function as designed.**

A stormwater management system operation and maintenance plan is required as part of the ATS solid waste permit application and the Notice of Intent for each site. The Operation/Maintenance Plans for the ATS and BRT sites were discussed in the fore going and explained in detail in Sections 5.1.6 and 5.2.3 of the EIR. Additional operation and maintenance practices may be required for the ATS site by the DEP solid waste permitting process.

NOISE

Operation of the facility will generate sounds from equipment and activities on the site as well as from vehicles on public ways traveling to and from the facility. A noise modeling study was conducted to assess the potential impact of the sounds from project operation and project traffic on the community. Residential locations within ½ mile of the facility were located and quantified. Baseline ambient sound levels were established at the site and at representative community locations by field measurements. The site layout and facility operation were summarized in terms of the sounds that will be emitted during operation. A conservative estimate of sound levels expected from facility operation was made. Using acoustic modeling procedures, the resulting sounds from the operation were estimated at site property lines and at representative community locations. The predicted plant sound levels were compared to the ambient sound levels at community locations to assess the potential project noise impact, or increase in the ambient sound levels. The project sound levels are expected to be well below the applicable requirements of the Massachusetts DEP Noise Policy. The levels were also compared to the 3 dBA threshold of noticeability, a tool commonly used in environmental noise studies. Project sound levels are expected to be just noticeable during the peak activity periods at the nearest residences. The project will be unnoticeable during periods of less activity and at more distant locations.

Transportation sounds were modeled separately using methods that were developed specifically for estimating roadway traffic noise. The modeling reflected the specific roadway geometry and sound propagation characteristics of the communities near the site. Traffic volumes used in this modeling are consistent with the project traffic analysis. A comparison was made of the sound levels predicted for the peak traffic volumes under the 2005 build and 2005 no-build alternatives. The difference between the build and no-build sound levels represents the sound level increase resulting from project traffic under future conditions. The study was supplemented with a similar comparison of build and no-build alternatives using traffic volumes and vehicle distribution with the Route 3 Access Road in place (year 2020). The traffic noise increases are expected to be less than noticeable under both future scenarios and at all community locations.

The predicted impacts of the plant operation and traffic sources were evaluated separately, since they represent different acoustic increments. The plant sound levels were compared to ambient baseline levels established by field measurements. The incremental change corresponds to the expected increase in the ambient sound level in terms consistent with the requirements of the DEP Noise Policy. The traffic related sound level increment, on the other hand, corresponds to the difference between the predicted traffic related equivalent levels under future conditions. Combining the two values is not technically appropriate. Since non-project related commercial development and increased traffic are expected in all future scenarios, the potential for the facility to affect the community noise levels will decrease in future years.

NUISANCE CONDITIONS OF ODOR, VERMIN AND LITTER

The presence of solid waste, specifically municipal solid waste (MSW), has the potential to create nuisance conditions. Transfer stations and recycling facilities, if not properly operated, may produce nuisances of odors, vermin (sometimes called vectors, more commonly called rodents, insects and birds) and litter. With adequate facility design, construction and operation and appropriate buffer space (distance) between the solid waste facility and sensitive receptors (people), impacts of these nuisance conditions are mitigated to an undetectable level.

The primary and most effective nuisance mitigation measure that will be applied at the ATS site will be the construction of the transfer station's structural building and the conduct of all solid waste handling operations within that structure. The conduct of waste handling operations within the enclosing structure will sufficiently reduce the dispersion of potential adverse impacts associated with litter and air quality, such as dust, odors and noise, to a point where no detectable impact to receptors will occur. The conduct of all solid waste handling and the rapid movement of the waste through and out of the transfer station and recycling facility will prevent vermin from utilizing the MSW waste stream as a food source.

Odors

In addition to the primary air quality control of conducting all solid waste operations inside the transfer station building there are other controls that will be used to reduce adverse impact from odors. Additional controls for odor will be provided by the spot application of odor suppressants. There are several commercially available products that can be applied to wastes by portable, containerized application systems or by fixed nozzle systems. Suppressants work in various ways to accelerate the reactions which allow the breakdown and dissipation of the odor causing compounds. In some cases, the odor molecule is subjected to shifts in the valences which hold the radicals together. Instantly millions of chemical reactions begin to occur as oxygen, carbon and hydrogen molecules escape to recombine, react and then continue reacting until non-offensive forms are attained. Sometimes a gentle shift in pH is used to enable a rapid balancing to neutral, non-odorous compounds.

It is proposed that a portable application container system will be used as a supplemental odor control system. There will be several suppressant application containers stored around the tipping floor, ready for immediate use by the transfer station's operating personnel. The operating personnel will apply the suppressant immediately, upon detection of an odor problem and will continue to apply the material until the problem has been mitigated. Should a single odor event persist in threatening to migrate beyond the transfer station's boundaries, the building's doors can be closed within one minute to contain these odors. The cause of the odor can then be directly and rapidly isolated, treated and made ready for removal from the site by the operator. The station's air space can also be treated with the suppressant before the doors are reopened. These controls will limit odor conditions to the inside of the transfer station building and eliminate the potential for any off site odor impact from the transfer station's operation.

ATS has also identified, reviewed and developed possible contingency plans for additional air quality controls. A high rate ventilation and dust removal system can be retrofitted into the transfer station structure. The ventilation system would rapidly draw air from space above the tipping floor at a height where small diameter dust particles would be captured. The ventilation system would then discharge through either a bag filter or a cyclone settler, to remove the dust. An odor control system could potentially be added to the ventilation system. Another contingency that can be installed is a fixed nozzle odor suppressant system. These systems have been successfully used in many solid waste handling and wastewater treatment facilities.

Two contingency alternatives that isolate the interior air of the station were also identified and reviewed. The first is the installation of air curtains on each of the bay doors along the south side of the building, where the waste delivery trucks enter the building. Another isolation contingency that was considered was a series of vestibules or air locks between the interior of the station and the outside. This contingency would require an entrance way that is large enough to hold a waste delivery truck, with doors on each end. An incoming waste load would enter the vestibule through the opened outside door; the outside door would be closed; the inside door would be opened; and the truck would enter the inside area of the station. These systems are intended as contingencies, should odor conditions result in nuisances that are subject to enforcement actions by DEP or the Abington Board of Health. Without an identifiable benefit of adding the cost of expensive systems that may prove difficult to operate, these contingencies are not proposed at this time. These systems can be retrofitted into the proposed transfer station building, if necessary. ATS is fully aware that DEP & BOH could revoke their permits if impacts do occur and corrective actions are not satisfactorily taken. However, the primary mitigation measure of conducting all solid waste handling operations inside of the transfer station building is anticipated to provide adequate odor control so that no adverse impacts occur to receptors and no contingency actions are necessary.

Vermin (Rodents, Insects and Birds)

Vermin, which is defined in the solid waste regulations as vectors but which is more commonly recognized as rodents, insects and birds, can cause nuisance and health concerns, if they are not controlled. The food residue, or garbage, portion of MSW can attract vermin as a food source.

In order to limit the vermin's access to the waste as a food source, the MSW solid waste will be rapidly moved from the tipping floor to the transfer trailers and the trailers will be removed from the site as soon as possible, once they are filled. The rapid movement of the waste from the tipping floor and the activity of trucks and handling equipment inside the building will limit the access of the larger vermin, such as birds and rodents, to the waste. Should birds become a nuisance problem, there are commercially available ultrasonic bird repellent devices that will be used throughout the station. Manufacturers of these devices claim that they are extremely effective inside buildings such as the transfer station and recycling facility structures. If insects are present around the waste, either while it is on the tipping floor or in the transfer trailers, commercially available insecticides can be applied to the area around the waste to repel the insects.

At the close of each operating day, all refuse will be removed from the tipping floor and loaded into the appropriate transfer trailers. Partially full trailers will remain in the building overnight. The tipping floor will be swept clean. No refuse will be left on the tipping floor overnight. Similarly, recyclables will not remain on the tipping floor for extended periods before being deposited into roll-off containers.

In addition, the tipping floor will be washed regularly to prevent the development of conditions conducive to the presence of rodents, insects, or other vermin. The transfer station will be regularly inspected by a person experienced in the control and extermination of insects and rodents. If applications of pesticides and rodenticides are necessary, this will be carried out by a licensed exterminator. ATS plans to contract an exterminator to conduct monthly extermination services.

Litter

Litter is a condition that can be mitigated by restricting or eliminating the exposure of the light solid waste materials to wind or other transportation mechanisms. All solid waste handling and transfer operations will be conducted within the ATS building. No solid waste handling or other operations will be conducted on the BRT property, thus there will be no litter source on this site. The ATS building is the primary mitigation measure which will drastically reduce the potential for wind blown litter. Station employees who are working on the tipping floor will, as a regular part of their job, pick up loose litter before it has a chance to blow out of the building. Facility personnel will routinely police the transfer station premises, adjoining properties and Route 18 for any litter which may result from operations. Additionally, fencing and tree plantings will be provided around the entire ATS operations area. The fence will be constructed along the property line and will enclose the vehicle maintenance section of the existing building, the proposed transfer station building, parking and driveway area, and sedimentation basins. The fencing and plantings, beside screening the facility from public view and providing security, will also provide litter control.

All vehicles transporting loads of solid wastes or recyclables to and from the transfer station will be required to be covered to prevent incidental litter. This is a state law and is subject to enforcement by any state or local police department, as a traffic violation. Trucks carrying light and dusty waste will not be allowed to remove their covering canvas outside the building on windy days.

POTENTIAL IMPACTS AND PROPOSED MITIGATION MEASURES

POTENTIAL IMPACTS

Potential impacts that may result from the proposed ATS Transfer Station and Recycling Facility that have been identified by the MEPA review process are:

1. The proposed solid waste handling facility will produce a slight increase in traffic in the immediate vicinity of the facility and on the regional public road system. This increased traffic could result in transportation delays or increased safety hazards on the public roads.

2. The proposed solid waste handling facility could produce increased noise in the immediate vicinity and in the region of the facility. This increased noise could be the result of increased traffic on the site and on the road system or use of heavy equipment to move the waste and the actual movement of waste. The potential increased noise levels can be a minor nuisance to human receptors or can cause adverse effects on human health.
3. The construction and operation of the solid waste handling facility can potentially produce adverse impacts to groundwater, surface water and wetlands resource areas. Impacts can result in denigration of these resources by increased volumes of runoff and sediment or the release of contaminated water resulting from waste handling operations.
4. The proposed solid waste handling facility could produce the temporary degradation of air quality in the vicinity of the facility. The degradation of air quality could result from operating practices that would produce emissions of dust and odor. These emissions can be a minor nuisance to human receptors or can cause adverse effects on human health.
5. The presence of decomposable solid waste can be an attraction as a food source to a variety of vermin, including rodents, insects and birds. As with other potential impacts, the presence of these vermin can be a minor nuisance to human receptors or can cause adverse effects on human health.
6. The presence of solid waste can also be the source of litter, which is a nuisance to people exposed to this impact.

PROPOSED MITIGATION MEASURES

1 Roadway Improvements and Operations Controls For Traffic Impact Mitigation

- a. Retiming of traffic signals at the intersections of Route 18 at Park Avenue; Route 18 at Columbian Street, and Route 58 at Route 123 will improve level of service ratings for either 2005 Build or 2005 No-Build conditions by an average of one rating level.
- b. The recommended improvements at the ATS access are to provide an acceleration lane exiting the site driveway toward the north and a deceleration lane accessing the site from the south along Route 18.
- c. Route 18 will remain a one-lane per direction state highway with a widening to provide a bypass on the Route 18 southbound direction in front of the site.
- d. New pavement markings will be provided along Route 18 in front of the site.
- e. The site driveway will consist of one 20-foot entering lane and a 20-foot exiting lane separated by a 3-foot median island with 50-foot turning radii.
- f. The site exiting lane will be striped with a STOP line, and controlled by a STOP sign.
- g. A review of the LOS and Delay values indicates that there is no significant impact on traffic from the proposed project when comparing the year 2005 No-Build and Build conditions. However, ATS is willing to propose an initial permitted tonnage reduction, within its Authorization To Operate permit, that will revert to 1,800 tpd upon completion of any of the highway improvements that MHD is proposing relative to the redevelopment of the South Weymouth Naval Air Station (SWNAS). These highway improvements are intended to mitigate the impact of traffic increases resulting from the redevelopment of the SWNAS,

which are projected to be about 100 times more vehicle trips than are proposed for the ATS and BRT sites combined.

2 Noise Impact Mitigation

- a. The project has been designed with attention to minimizing project noise impacts.
- b. The project has been sited on industrially zoned property, which has a history of industrial use.
- c. The site is surrounded by commercial and industrial activities that are insensitive to the levels of noise expected from the transfer station.
- d. The site is on a major roadway where project traffic will produce traffic noise increases that are not noticeable. This is one of the reasons that all transfer station traffic will be limited to accessing the transfer station by Route 18.
- e. The ATS building has been adequately sized to conduct all of the material handling activities inside the building enclosure.
- f. The building also reduces the equipment activity that would take place outside the building.
- g. The building has been laid out with only the large transfer trailers on the north side of the building. This will allow the doors on the north side of the building to be generally closed. This maximizes the acoustic benefit of the building enclosure.
- h. Impacts because of noise are not expected to be produced by operations on the BRT property.

3 Water Quality, Stormwater Runoff and Wetlands Impact Mitigation

- a. All waste handling operations, at the ATS site, are to be conducted inside the transfer station and recycling facility building. Conducting all waste handling operations inside of a building will significantly reduce the volume of water that will be exposed to waste (leachate).
- b. All liquids that will be exposed to the tipping floor of the ATS buildings will be collected in a closed drainage system for discharge or transportation to a wastewater treatment plant. There will be no discharge of liquids collected inside the buildings to the environment.
- c. Stormwater runoff collected from the building roof and the paved parking areas of both the ATS and BRT sites will be collected in a storm drainage system and will be treated utilizing Best Management Practices (BMPs), as defined by DEP.
- d. Based upon stormwater calculations, post-development stormwater runoff rates will not exceed calculated, pre-development runoff rates for both the ATS and BRT properties.
- e. Extensive stormwater and erosion control structures have been designed to conform to the DEP Stormwater Management Policy and have been approved in Orders of Conditions (OOCs) issued by the Abington Conservation Commission.
- f. Wetlands resource areas will be protected from adverse impact during construction phases by the erosion and sedimentation controls that have been approved in the Abington Conservation Commission's OOCs for both the ATS and BRT properties. The protection measures have been installed on BRT property.
- g. Approximately 7,500 square feet of replicated wetlands have been constructed on BRT

property to compensate for filling approximately 1,500 square feet of wetlands, in accordance with BRT's OOCs.

- h. ATS's and BRT's stormwater and sedimentation facilities will be operated and maintained in accordance with the maintenance plans approved in each of the properties' OOCs and ATS's draft Authorization to Construct (ATC) Permit.
- i. The regulatory standard of two feet of vertical separation between the maximum groundwater elevation and the transfer station will be maintained by a conventional, passive underdrain system at the ATS site.
- j. Groundwater quality at the ATS site can be reliably monitored by the discharge of the underdrain system or by installation of groundwater monitoring wells.
- k. In the unlikely event that the ATS site impacts groundwater quality, the discharge of the underdrain system can be collected and treated as a groundwater remediation method.

4 Dust Impact Mitigation

- a. All waste handling operations, at the ATS site, are to be conducted inside the transfer station and recycling facility building. Conducting all waste handling operations inside of a building will significantly reduce the volume of dust that could migrate from the site.
- b. There will be a system of multi-layer inspections conducted on a regular basis to identify, report and enforce mitigation measures for any adverse impacts that may result from operation of the ATS facility. Inspections will regularly be conducted by the operator, a professional engineer, the Abington Board of Health, and DEP.
- c. All vehicles hauling waste must be covered as they travel to and from the facility on the public roads, in accordance with state law.
- d. On windy days, trucks will not be allowed to be uncovered outside of the transfer station and recycling facility building.
- e. Site driveways will be swept and the building's tipping floor will be swept and hosed down on a regular schedule to remove dust.
- f. There will be yard hydrants inside the station building to hose down dusty loads immediately.
- g. If an unforeseeable and extreme dusty condition occurs the transfer station building doors can be closed within a minute, to allow for the control of the short term situation.
- h. ATS has identified a number of structural contingency measures that could be constructed at a later time to provide additional mitigation of dust conditions, should they occur during the operating life of the facility. These contingencies include:
 - Installation of a high rate ventilation and dust removal system.
 - Installation of a mister system to knock down dust.
 - The installation of air curtains at the structure's doors.

5 Odor Impact Mitigation

- a. All waste handling operations, at the ATS site, are to be conducted inside the transfer station and recycling facility building. Conducting all waste handling operations inside of a building will significantly reduce the potential for odors to migrate from the site.

- b. There will be a system of multi-layer inspections conducted on a regular basis to identify, report and enforce mitigation measures for any adverse impacts that may result from operation of the ATS facility. Inspections will regularly be conducted by the operator, a professional engineer, the Abington Board of Health and DEP.
- c. Municipal solid waste, which contains decomposable material and has the greatest potential to create odors, will be moved rapidly through the transfer station, reducing the potential for dispersion of odors.
- d. There will be commercially available odor suppressant products at the immediate access of transfer station operations personnel. The suppressants will be directly applied to waste piles on the tipping floor and to partially and fully loaded transfer trailers that are noted to be odorous to the operating personnel. The immediate response of suppressant application will reduce or eliminate odors before they can migrate from the buildings to the outside air.
- e. If an unforeseeable and extreme odorous condition occurs the transfer station building doors can be closed within a minute, to allow for the control of the short term situation.
- f. ATS has identified a number of structural contingency measures that could be constructed at a later time to provide additional mitigation of odor conditions, should they occur during the operating life of the facility. These contingencies include:
 - Installation of high rate ventilation equipment that would include an odor control system.
 - Installation of a fixed nozzle odor suppressant application system.
 - The installation of air curtains at the structures doors.
- g. Impacts because of odor are not expected to be produced by operations on the BRT property.

6 Vermin (Rodents, Insects and Birds) Impact Mitigation

- a. All waste handling operations, at the ATS site, are to be conducted inside the transfer station and recycling facility building. Conducting all waste handling operations inside of a building will significantly reduce the potential for vermin to exist on the site.
- b. There will be a system of multi-layer inspections conducted on a regular basis to identify, report and enforce mitigation measures for any adverse impacts that may result from operation of the ATS facility. Inspections will regularly be conducted by the operator, a professional engineer, the Abington Board of Health, and DEP.
- c. Municipal solid waste, which contains decomposable material and has the greatest potential to attract vermin, will be moved rapidly through the transfer station, reducing the potential for vermin to be attracted or be present around the station.
- d. Heavy vehicle traffic inside the transfer station (the only area where waste will be exposed) will discourage the vermin from gaining access to the waste.
- e. Ultrasonic bird repellants will be used inside the station to discourage the presence of birds.
- f. There will be commercially available insecticide products at the immediate access of transfer station operations personnel. The insecticides will be directly applied to waste piles on the tipping floor and to partially and fully loaded transfer trailers that are noted to be attracting insects.
- g. A professional exterminator will be contracted by ATS to conduct monthly inspections and

- extermination services.
- h. Impacts because of vermin are not expected to be produced by operations on the BRT property.

7 Litter Impact Mitigation

- a. All waste handling operations, at the ATS site, are to be conducted inside the transfer station and recycling facility building. Conducting all waste handling operations inside of a building will significantly reduce the potential for uncontrolled litter to exist on and near the site.
- b. There will be a system of multi-layer inspections conducted on a regular basis to identify, report and enforce mitigation measures for any adverse impacts that may result from operation of the ATS facility. Inspections will regularly be conducted by the operator, a professional engineer, the Abington Board of Health, and DEP.
- c. All vehicles hauling waste must be covered as they travel to and from the facility on the public roads, in accordance with state law.
- d. On windy days, trucks will not be allowed to be uncovered outside of the transfer station and recycling facility building.
- e. The tipping floor will be continually monitored for loose paper and other litter producing materials so that these materials can be controlled before they leave the building.
- f. The ATS site and adjoining properties will be inspected on a daily basis and litter will be picked up.
- g. Impacts from litter are not expected to be produced by operations on the BRT property.