

Groundwater Contamination - NY & PA

- Require pre-project mapping of groundwater flow paths from entire landfill site including characterization of flow under saturated ground conditions
- Require pre-project monitoring of drinking water wells, capturing saturated and dry antecedent conditions, sufficient to document changes in water quality resulting from the proposed landfill and truck traffic on the associated haul routes, paid by the applicant. Monitoring distances should be commensurate with reasonable / documented transport distances (and a factor of safety) for the chemicals and compounds anticipated at the proposed project site, including non-C & D landfill material since Sealand wants to reserve the possibility of accepting that at a later time. Monitoring protocols should be legally defensible in the event court action is required.
- Conduct and disclose a chemical profile, including potential for movement through groundwater of proposed wastes to be accepted (as per permit application), including Maximum Contaminant Levels (MCL) or equivalent standards, for each chemical or compound to be accepted at the landfill, including non-C & D landfill material since Sealand wants to reserve the possibility of accepting that at a later time. Also disclose risks to humans, domestic animals, and livestock by ingestion through water, plants, or animal tissue. If risks are reasonably present, disclose compensatory loss responsibilities borne by the applicant.
- Disclose legally defensible data needs for landowner assertion to claim contamination of their drinking water supply.
- Require modeled movement of chemicals from proposed landfill downslope and downstream, considering local topography, project modifications at source area, and down-gradient transport.
- Conduct and disclose a risk assessment of waste to contaminate groundwater and model the fate of a contaminant plumes over time (life of project and 100 years beyond reclamation)
- Disclose anticipated depths of excavation for the proposed project site preparation and residual soil and bedrock characteristics, especially as they may affect leaching and transport of contaminants that would be allowed to be landfilled on the site in the event of liner failure. Contaminants considered should include non-C & D landfill material since Sealand wants to reserve the possibility of accepting that at a later time.
- Require groundwater monitoring plan during and after project, including funding / bonding, qualifications, frequency, timing, and reporting requirements
- Disclose compensatory loss requirements on Sealand Waste in the event private or public drinking water supplies are contaminated by the project or associated activities
- Disclose the hazard mitigation plan along haul routes and at project site
- Disclose the groundwater protection plan including funding, responsible parties, qualifications, monitoring frequency, reporting requirements, regulatory enforcement capability (as they influence mitigation effectiveness), and conflict resolution procedures.
- Disclose the regulatory, mitigation, and liability requirements in the event a leachate leak is detected once the project has commenced, up to 100 years after reclamation.

- Disclose the fate of the groundwater protection plan in the unlikely event that Sealand Waste goes bankrupt.

Potential Mitigation

- Excavate the dump such that the ground slopes away from Storehouse Run.
 - Consider alternative phasing of the operation such that cells closest to Storehouse Run are the last to be filled.
 - Double-line the landfill from the beginning to provide additional protection to landowners and surrounding resources.
 - Data characterizing existing conditions will be shared with the Town of Carroll or their designee prior to project initiation.
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Surface Water Considerations - NY & PA

- The SWPPP should address not only water quality during operations and after reclamation, but increases in water volumes that could contribute to stream bed and bank erosion at and downstream of the project site. The SWPPP should also demonstrate consistency with the Warren County PA Stormwater Management Plan
- Require pre-project surface water monitoring sufficient to characterize existing water quality under a variety of flow conditions and to document changes in water quality resulting from the proposed landfill and truck traffic on the associated haul routes, paid by the applicant. Monitoring distances should be commensurate with reasonable / documented transport distances (and a factor of safety) for the chemicals and compounds anticipated at the proposed project site, including non-C & D landfill material since Sealand wants to reserve the possibility of accepting that at a later time. Monitoring protocols should be legally defensible in the event court action is required.
- Disclose the surface water protection plan including funding, responsible parties, qualifications, monitoring frequency, reporting requirements, and regulatory enforcement capability (as the influence mitigation effectiveness), and conflict resolution procedures.
- Conduct and disclose a chemical profile, including potential for movement via surface water of proposed wastes to be accepted (as per permit application), including Maximum Contaminant Levels (MCL) or equivalent standards, for each chemical or compound. Also disclose risks to humans, domestic animals, and livestock by ingestion through water, plants, or animal tissue. Profiles should include non-C & D landfill material since Sealand wants to reserve the possibility of accepting that at a later time. Also disclose risks to humans, domestic animals, and livestock by ingestion through water, plants, or animal tissue. If risks are reasonably present, disclose compensatory loss responsibilities borne by the applicant.
- Disclose legally defensible data needs for landowner assertion to claim contamination of surface water flowing through their property.
- Conduct and disclose a site-specific risk assessment modeling of surface water impacts by chemical or compounds from anticipated wastes, considering local topography from the project area to downstream locations in NY and PA. Analysis

should include non-C & D landfill material since Sealand wants to reserve the possibility of accepting that at a later time.

- Disclose the fate of the surface water protection plan in the unlikely event that Sealand Waste goes bankrupt.
- Disclose how / whether road reconstruction required to provide for safe transport of material to and from the proposed project site could affect stormwater.
- The proposed reclamation could result in slope failure and impacts to water resources, especially Storehouse Run. Disclose in the DEIS how this concern will be addressed proactively, other than by stormwater retention

Potential Mitigation

- Move the proposed base of operations further northwest (to or near the existing landfill) or to SW corner of property to increase the distance between operations and Storehouse Run.
 - Excavate the dump such that the ground slopes away from Storehouse Run.
 - Consider alternative phasing of the operation such that cells closest to Storehouse Run are the last to be filled.
 - Data characterizing existing conditions will be shared with the Town of Carroll or their designee prior to project initiation.
 - Require leachate be collected in above-ground enclosed tanks instead of a basin.
 - Require leachate transport documentation from source to WWTP
 - Consider permitting for a lesser volume of material so the final site topography is not as steep, and possibly subject to slope failure.
 - Look for ways to reduce direct contribution of surface water in all phases of site development & closure to reduce stormwater contributions toward Storehouse Run.
 - Alter surface topography of closed site to reduce sheet flow from the finished pile.
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Permit Compliance – NY & PA

- Because permit compliance will have direct bearing on environmental impacts, disclose how DEC will monitor and enforce permit conditions to prevent adverse environmental impacts over the life of the project in light of their current funding and capability crisis.
- Disclose how NY DEC will coordinate with PA DEP to prevent environmental impacts related to the project, given that it's located in a sub-watershed with area in both states.
- Disclose applicant's compliance with permit conditions in their operations over the last 10 years as this indicates their commitment to the environment and communities in which they operate. More specifically, document any citations they have received and disclose how and when they addressed them, if there are any.

Potential Mitigation

- § 4.10 (Closure and Post-Closure Plan) references a 'minimum required 30-year post-closure period' during which time Sealand Waste is responsible for the cost of monitoring and maintenance of the site. The proposed post-closure topography will

limit future use of the land by another owner. At no time should any subsequent landowner or the Town be responsible for issues related to the landfill. Therefore Sealand Waste has a financial responsibility for any problem that should arise related to the landfill in perpetuity.

Air Quality – NY & PA

- Require pre-project air quality monitoring under a variety of seasonal and atmospheric conditions sufficient to document changes resulting from the proposed landfill and truck traffic on the associated haul routes, paid by the applicant. Air quality monitoring protocols should be legally defensible in the event court action is required. Constituents monitored should include emissions from processing of non-C & D landfill material since Sealand wants to reserve the possibility of accepting that at a later time. Monitoring protocols should be legally defensible in the event court action is required.
- Disclose how existing air quality, once documented, will be maintained (or not rise above documented standard thresholds) during transport to and from the landfill, and from landfill operations over the life of the project, including reclamation, so that current and future residents will not be adversely affected by air quality impacts.
- Require modeled air quality impacts resulting from transport to and from the project site as well as landfill operation, using site-specific local wind patterns.
- Disclose potential health impacts to humans and animals based on modeled air quality impacts and disclose required mitigation to prevent those impacts.
- Disclose the required air quality monitoring plan including funding, responsible parties, qualifications, monitoring frequency, reporting requirements, and regulatory enforcement capability (as the influence mitigation effectiveness), and conflict resolution procedures.
- Disclose legally defensible data needs for assertion to claim contamination of the air supply from proposed project operations, including hauling to and from the site, routine operations under varying seasonal conditions, and CDPO operations.
- Disclose the fate of air quality emanating from the project site in the unlikely event that Sealand Waste goes bankrupt.

Potential Mitigation

- Adjust hours of operation or other elements of the project to reduce and avoid noise impacts on surrounding landowners and communities.
 - Data characterizing existing conditions will be shared with the Town of Carroll or their designee prior to project initiation.
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Noise – NY & PA

- Require pre-project noise monitoring under a variety of seasonal conditions sufficient to document changes resulting from the proposed landfill operations and truck traffic on the associated haul routes, paid by the applicant
- Disclose how existing noise levels, once documented, will be maintained (or not rise above documented standard thresholds) during transport to and from the landfill, and

from landfill operations over the life of the project, including reclamation, so that current and future residents will not be adversely affected by noise impacts.

- Disclose modeled noise impacts resulting from transport to and from the project site as well as landfill operation, using site-specific local wind patterns.
- Disclose potential health impacts to humans and animals based on potential noise impacts and disclose required mitigation to prevent those impacts.
- Disclose legally defensible data needs for assertion to claim increases above ambient noise thresholds from proposed project operations, including hauling to and from the site, routine operations under varying seasonal conditions, and CDPO operations.
- Disclose the required noise monitoring plan including funding, responsible parties, qualifications, monitoring frequency, reporting requirements, and regulatory enforcement capability (as the influence mitigation effectiveness), and conflict resolution procedures.
- Data characterizing existing conditions will be shared with the Town of Carroll or their designee prior to project initiation.

Potential Mitigation

- Adjust hours of operation or other elements of the project to reduce and avoid noise impacts on surrounding landowners and communities.
 - Data characterizing existing conditions will be shared with the Town of Carroll or their designee prior to project initiation.
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Threatened or Endangered Species – NY & PA

- Using a combination of existing documentation and field work, disclose the presence of or habitat for any currently State (NY or PA) or Federally-listed threatened or endangered species potentially affected by the project or haul routes associated with the project.
 - Disclose required mitigation to maintain viable populations of threatened or endangered species potentially affected by the project or along haul routes associated with the project (including direct and indirect effects).
 - Disclose required monitoring to document whether project activities are affecting State- or Federally-listed threatened or endangered species.
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Conservation of Functional Landscapes

- Riparian zones, wetlands, floodplains, and moderate-to-large blocks of forested areas help reduce the costly, adverse impacts associated with large runoff events—either summer thunderstorms or snowmelt. Warren County PA has recently enacted a county-wide Stormwater Management Plan. Disclose in the DEIS how the applicant will be required to conserve these functional landscapes, or mitigate if they are compromised.

Potential Mitigation

- Based on impacts identified in the DEIS, consider avoidance or contribution to conservation purchase or easement as compensation, if appropriate.

Invasive Species

- Document pre-project species composition, presence and extent of terrestrial and aquatic invasive species on the site and adjacent properties. Documentation should be sufficient to be legally defensible if used in court.
- Disclose how invasive species will be managed, monitored, and mitigated on-site and especially as part of the vegetative recycling component of the construction and demolition processing operation (CDPO).

Potential Mitigation

- All CDPO operations should occur in lined or contained areas to reduce the potential for spread of invasive species.
 - Vehicle wheel washing water recovery should consider and mitigate for the likelihood of spreading invasive species via this operation.
 - Reclamation of the site should be phased to happen as soon as possible, by cell. It should include a species mix developed jointly by natural resources staff at Chautauqua County Soil & Water Conservation District, the Naturalist from nearby Jamestown Audubon, and Sealand reclamation staff.
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Community impacts

- § 5.13 of the Scoping Document includes some discussion of a Property Value Protection Plan (PVPP) and the possibility of Sealand paying the difference "...if a landowner is unable to sell their home at full market value due to impacts from the operation". Disclose in the DEIS the details of the PVPP, when and how full market value is determined, and how a landowner would legally and successfully defend a claim of this nature. Include examples, if any, associated with other regional landfills, including Seneca Meadows.
- The original DEC permit to operate the landfill was acquired in 1989. Disclose the scope and scale of operations from that time to the present. Disclose community character in and around the project area since that time (number of new homes, documented environmental problems). Disclose the scope and scale of the proposed project and associated activities, and how they will affect communities in both NY and PA. Disclose whether permitting the project could result in a legal taking of landowners rights to 'quiet enjoyment' of their home or property and who would be legally liable in the event of such a taking.

Potential Mitigation

- Set daily C&D intake volume limits at the facility to reduce the amount of truck traffic over the long-term and extend economic opportunity to the surrounding area.
- Limit hours of operation to reduce traffic impacts on the area, especially during dawn and dusk hours, nights, and weekends.
- Double-line the landfill from the start as an extra precaution.
- Any correspondence to DEC regarding the landfill and associated operations and monitoring, will be copied to the Town of Carroll, or their designee.

Public Safety

- Disclose anticipated traffic patterns related to the project, especially on roads used by school buses.
- Disclose in the DEIS truck traffic from all phases of CDPO operations separate from truck traffic related to landfilled material so that a traffic assessment of CDPO operations can be determined.
- Disclose mitigation that will be required to prevent injury or accidents on haul routes, especially those used by school buses.
- Disclose road segments that will require road reconstruction in order to accommodate anticipated truck traffic into and out of the proposed project site.
- Disclose whether / how road reconstruction required to provide for safe transport of material to and from the proposed project site could inadvertently affect the need for local emergency services due to increased drivability of area roads.

Potential Mitigation

- Develop alternative routing of truck traffic to reduce impacts on school bus routes.
 - Limit hours of operation to reduce project traffic volumes during peak hours, or
 - Set daily C&D intake volume limits at the facility to reduce the amount of truck traffic over the long-term.
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Environmental Justice – NY & PA

- Disclose current Environmental Justice areas (including PA's equivalent) and if or how the proposed project, including associated haul routes could impact affected areas from an environmental justice perspective. Population density should be considered in addition to economics and racial diversity.
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Routine Operation of the Landfill

- Describe how operations will be impacted, particularly leachate considerations, in the event of an extended power outage.
 - § 5.6 includes discussion of potential impacts to aesthetics. § 5.8 states that "There are no parks or other recreational areas in the vicinity of the site that would be impacted by the landfill expansion." Verify in the DEIS there are no potential impacts of the entire operation, including haul traffic on and at Tom Erlandson Overview Park, on Oak Hill Road. Especially consider impacts on air quality, visuals, and noise at that location.
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Other

- Disclose in the DEIS how this proposal is consistent with the Chautauqua County Solid Waste Management Plan.

- Disclose in the DEIS how the proposed project will affect (enhance or detract from) the economics related to the following programs funded by Chautauqua County through their landfill receipts:
 - Public education and outreach
 - Comprehensive recycling program
 - Household hazard waste collection program
 - Local transfer stations
 - Waste tire baling and utilization
 - Maintenance and monitoring by the County of closed landfills
- The Environmental Monitoring Plan (EMP) referenced in §4.5 is not a named item in Subpart 360-7 (Internet, as of 3/17/11). The EMP should be subject to public review and comment prior to an operating permit being granted.
- In the DEIS, complete a full analysis of the No-Action alternative.
- The anticipated volume of material landfilled is driving many other factors—truck traffic, reclamation topography, project life, etc. Though 14.5 years seems like a long time, it's consistent with boom-and-bust economics. In the DEIS, develop alternative project scenarios, including landfill volumes and economic analysis for both shorter and longer timeframes than the proposed times.
- Document in the DEIS peer-reviewed literature used as a basis for assumed concentrations of pollutants that will be used to directly or indirectly influence project design measures.
- Disclose in the DEIS the slope and topography of the reclaimed site in the context of the surrounding area, including Tom Erlandson Overlook Park.