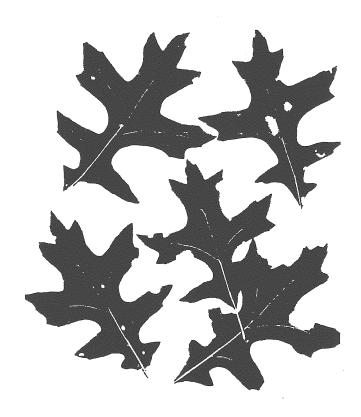
# Proposed Retail Development

Old Saybrook, Connecticut



# EASTERN CONNECTICUT ENVIRONMENTAL REVIEW TEAM REPORT

Eastern Connecticut Resource Conservation & Development Area, Inc.

# Proposed Retail Development Old Saybrook, Connecticut

Eastern Connecticut
Environmental Review Team Report

Prepared For The Old Saybrook Planning Commission

July 1995

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# Acknowledgements

This report is an outgrowth of a request from the Old Saybrook Planning Commission to the Middlesex County Soil and Water Conservation District (SWCD). The SWCD referred this request to the Eastern Connecticut Resource Conservation and Development (RC&D) Area Executive Council for their consideration and approval. The request was approved and the measure reviewed by the Eastern Connecticut Environmental Review Team (ERT).

The ERT met and field checked the site on Friday, June 9 and Friday, June 16, 1995. Team members participating on this review included:

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Prior to the review day, each Team member received a summary of the proposed project, a list of the town's concerns, location map, topographic map, soils map and additional information. During the field review the Team members were given plans and additional materials. Some Team members also received plan revisions after the field reviews. The Team met with , and were accompanied by members of the planning commission, zoning commission, inland wetlands commission, the zoning board of appeals, the zoning enforcement officer, the inland wetlands officer and sanitarian, the town's engineer, the attorney for the applicant and their engineers and consultants, as well as a newspaper reporter. Following the review, reports from each Team member were submitted to the ERT coordinator for compilation and editing into this final report.

This report respresents the Team's findings. It is not meant to compete with private consultants by providing site designs or detailed solutions to development problems. The Team does not recommend what final action should be taken on a proposed project - all final decisions rest with the town and landowners. This report identifies the existing resource base and evaluates its significance to the proposed development, and also suggests considerations that should be of concern to the developer and the Town. The results of this Team action are oriented toward the development of better environmental quality and the long-term economics of land use.

The Eastern Connecticut RC&D Executive Council hopes you will find this report of value and assistance in making your decision on this proposed retail development.

If you require additional information, please contact:

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### Introduction

An environmental review was requested by the Old Saybrook Planning Commission for a proposed retail development.

The site is located near the intersection of Spencer Plain Road (Route 166) and the Boston Post Road (Route 1). The ±18 acre site is located in a B-4 General Business Zone.

The proposed development will include a 105,553 square foot retail department store with a 6,870 square foot outdoor sales area. A large area will be paved for parking and access. Three on-site detention areas are planned as well as use of a town maintained off-site detention basin located in the adjacent industrial park. The site is not suitable for a conventional septic system so an advanced wastewater treatment facility is proposed. There will be access to the site from three locations: Spencer Plain Road, Boston Post Road and Center Road.

The existing land is wooded with an open field in the northeast corner of the site. Two residential structures located in the eastern portion of the site will be razed. The site is relatively flat, sloping from west to east. Wetlands are located in the northeast portion of the site.

The Planning Commission requested the ERT to provide environmental information on the possible impacts from runoff and stormwater drainage, the sewage treatment facility, erosion and sediment controls, land use, site design, and traffic and access.

This report addresses those issues by providing basic natural resource information, highlighting areas of concern, describing permits and materials that the applicant needs to apply for and provide, and making recommendations for the mitigation of possible negative impacts. The purpose of the ERT study is not to render a decision on the desirability of the project but to provide objective natural resource and planning information that will assist the town commissions in making environmentally sound decisions.

### The Environmental Review Team Process

Through the efforts of the Town of Old Saybrook and the Eastern Connecticut ERT this environmental review and report was prepared for the town. This report primarily provides a description of the on-site natural resources and presents planning, management and land use guidelines. The review process consisted of four phases:

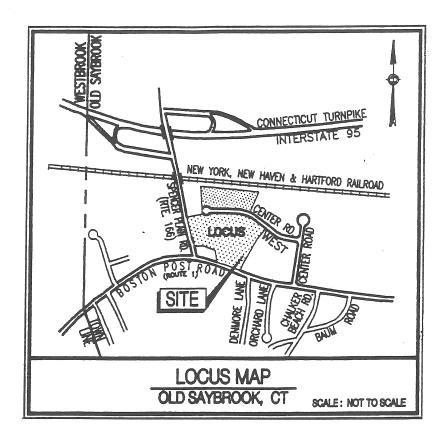
- 1. Inventory of the site's natural resources (collection of data);
- 2. Assessment of these resources (analysis of data);
- 3. Identification of resource problem areas, and
- 4. Presentation of planning, management and land use guidelines.

The data collection phase involved both literature and field research. The ERT field review took place on June 9 and 16, 1995. Mapped data and technical reports were also perused, specific information concerning the property was collected. Being onsite allowed Team members to verify information and identify other resources.

Once Team members had assimilated an adequate data base, they were able to analyze and interpret their findings. Results of this analysis enabled Team members to arrive at an informed assessment of the property's natural resource opportunities and limitations. Individual Team members then prepared and submitted their reports to the ERT coordinator for compilation into this final report.

### Location Map





### Topographic Map

Scale 1" = 2000'



### Soil Resources

The soils located within the project site are formed in glacial till uplands and are moderately well to well drained. The exception is a triangular shaped poorly to very drained wetland located in the northeastern corner of this site. This wetland soil is mapped as very poorly drained Adrian and Palms muck. This is the southern tip of a larger wetland system which is bisected by the railroad tracks. The Middlesex County soil survey indicates that a section of poorly drained wetland soils (LG - Leicester, Ridgebury and Whitman soils) was located adjacent to and south of the Adrian and Palms muck. The boundary of this soil unit is located to the east of the project site.

The glacial upland soils are gently sloping and are associated with glacial formations such as drumlins and upland hills. The degree of stoniness varies and it should not be a major factor for development. The biggest limitation of these soils is wetness from a perched water table. These soils have a compact layer, commonly called hardpan, which restricts downward movement of water in the soil column. A perched water table condition commonly occurs during the fall through late spring months due to more plentiful precipitation and less uptake from plants. The perched water table presents its biggest limitation to septic tank absorption fields and dwellings with basements.

Following are the general soils descriptions for the soil map units found within the project site as indicated in the Middlesex County soil survey. A copy of the soil sheet with the approximate boundaries indicated is included to show the soils mapping and the features, such as fields, that still exist.

### Non-Technical Soils Description Report

### Map Symbol

### Description

Aa

Adrian Palms and Mucks. These nearly level, very poorly drained soils formed in organic materials 16 to 50 inches thick overlying sandy and loamy deposits. They are in depressions and along streams of outwash plains and glacial till uplands. Depth to bedrock is commonly more than 60 inches below the surface. These soils are ponded or have water near the surface for most of the year. Permeability is moderately rapid in the organic layers and rapid to moderately slow in the substratum. Surface runoff is very slow and the available water capacity is high.

PbB

Paxton Fine Sandy Loam, 3 to 8 percent slopes. The Paxton series derived mainly from schist, gneiss and granite. In tilled areas, these sols have a dark brown fine sandy loam surface layer 8 inches thick. The subsoil from 8 to 26 inches is dark yellowish brown and olive brown fine sandy loam. The substratum from 26 to 60 inches is olive, very firm and brittle gravelly fine sandy loam. Slopes range from 0 to 35 percent.

These gently sloping, well drained soils formed in compact glacial till. They are on the tops and side slopes of drumlins and hills of glacial till uplands. Depth to bedrock is commonly more than 60 inches below the surface. These soils have a seasonal high water table perched at a depth of about 2 feet for several weeks in the spring. Permeability in the Paxton soil is moderate in the surface layer and subsoil and slow to very slow in the substratum. Permeability in the Montauk soil is moderate or moderately rapid in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium and the available water capacity is moderate.

PdB

Paxton Very Stony Fine Sandy Loam, 3 to 8 percent slopes. These gently sloping, well drained soils formed in compact glacial till. They are on the tops and side slopes of drumlins and hills of glacial till uplands. Stones cover from 1 to 8 percent of the soils surface. Depth to bedrock is commonly more than 60 inches below the surface. These soils have a seasonal high water table perched at a depth of about 2 feet for several weeks in the spring. Permeability in the Paxton soil is moderate in the surface layer and subsoil and slow to very slow in the substratum. Permeability in the Montauk soil is moderate or moderately rapid in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium and the available water capacity is moderate.

WyB

Woodbridge Very Stony Fine Sandy Loam, 3 to 8 percent slopes. The Woodbridge Series consists of very deep, moderately well drained soils on uplands. They formed in glacial till. In undisturbed areas, the surface is commonly very stony or extremely stony. Typically, these soils have a thin organic surface layer over a stony very dark grayish brown fine sandy loam surface mineral layer 3 inches thick. The subsoil from 3 to 20 inches is dark

yellowish brown and light olive brown fine sandy loam, mottled below 18 inches. The substratum below 30 inches is light olive brown, very from and brittle gravelly fine sandy loam. Slopes are 0 - 25%.

This gently sloping, moderately well drained soil formed in compact glacial till. It is on the top and side slopes of large drumlins and hills on glacial till uplands. Depth to bedrock is commonly more than 60 inches below the surface. From 1 to 8 percent of the soil surface is covered with stones and boulders. The soil has a seasonal high water table at a depth of about 20 inches from fall to spring. Permeability is moderate in the surface layer and subsoil and slow to very slow in the substratum. Surface runoff is medium and the available water capacity is moderate.

# Soil Interpretation Table

Fields Excavations  SEVERE  Gutbanks Cave, Excess Humas, Ponding SEVERE  ding, Excess Humas, Ponding MODERATE Dense Layer, Wet Dense Layer Wet SEVERE	Septic Tank Shallow	Dwellings	Small	Lawns,
Adrian SEVERE Subsides, Ponding, Percs Slowly Bacess Humas, Ponding Bacess Humas, Ponding Bacton Bercs slowly Wet Wet	Absorption Fields	Without	Commercial	Landscaping and
Adrian SEVERE Subsides, Ponding, Percs Slowly Percs Slowly Excess Humas, Ponding Batters Slowly Ponding Excess Humas, percs slowly Ponding Paxton SEVERE Percs Slowly Ponding Percs Slowly Bercs Slowly Bercs Slowly Bercs Slowly Berks Slowly Berks Slowly Berks Slowly Wet Wet Wet, Wet,		Basements	Buildings	Golf Fairways
Subsides, Ponding, Percs Slowly Percs Slowly Percs Slowly Balmas, Ponding SEVERE subsides, ponding Bacess Humas, Percs slowly Bakton Bakton Bakton Berks Slowly Berks Slowly Wet Wet		SEVERE	SEVERE	SEVERE
Palms       SEVERE Subsides, ponding, Percs slowly       Excess Humas, Ponding         Paxton       SEVERE Subsides, ponding, Percs slowly       Excess Humas, Ponding         Paxton       SEVERE Percs Slowly       MODERATE Dense Layer, Wet         Paxton       SEVERE Perks Slowly       MODERATE Dense Layer Wet         Woodbridge       SEVERE Wet,       Wet	onding,	Subsides, Ponding,	Subsides, Ponding,	Ponding Excess
Palms       SEVERE subsides, ponding, percs slowly       SEVERE Excess Humas, Ponding         Paxton       SEVERE Percs slowly       MODERATE Dense Layer, Wet         Paxton       SEVERE Perks Slowly       MODERATE Dense Layer, Wet         Woodbridge       SEVERE Net,       Wet		Low Strength	Low Strength	Humas
Palms       SEVERE         subsides, ponding,       Excess Humas,         percs slowly       Ponding         Paxton       SEVERE         Percs Slowly       Dense Layer, Wet         Perks Slowly       Dense Layer         Perks Slowly       Wet         Wet       Wet	Ponding			
Subsides, ponding, percs Humas, percs slowly Ponding  Eaxton SEVERE MODERATE Percs Slowly Dense Layer, Wet Denks Slowly Dense Layer  Woodbridge SEVERE MODERATE Dense Layer Wet SEVERE Wet Moderate Wet, Wet		SEVERE	SEVERE	SEVERE
Paxton       SEVERE       MODERATE         Percs Slowly       Dense Layer, Wet         Paxton       SEVERE       MODERATE         Perks Slowly       Dense Layer         Perks Slowly       Dense Layer         Wet       Wet         Wet,       Wet		Subsides,	Subsides,	Ponding,
PaxtonSEVERE Percs SlowlyMODERATE Dense Layer, WetPaxtonSEVERE Perks SlowlyMODERATE Dense Layer Wet.WoodbridgeSEVERE Net,SEVERE		Ponding,	Ponding,	Excess Humas
PaxtonSEVERE Percs SlowlyMODERATE Dense Layer, WetPaxtonSEVERE Perks SlowlyMODERATE Dense Layer Wet.WoodbridgeSEVERE NetSEVERE		Low Strength	Low Strength	
Percs Slowly Dense Layer, Wet  Raxton SEVERE MODERATE Perks Slowly Dense Layer Woodbridge SEVERE SEVERE Wet, Wet		MODERATE	MODERATE	SLIGHT
Paxton SEVERE MODERATE Perks Slowly Dense Layer Woodbridge SEVERE SEVERE Wet		•	Wet	
Paxton SEVERE MODERATE Perks Slowly Dense Layer Woodbridge SEVERE SEVERE Wet			Slope	
Perks Slowly Dense Layer Woodbridge SEVERE SEVERE Wet, Wet		MODERATE	MODERATE	MODERATE
Wet Woodbridge SEVERE Wet Wet		Wet	Wet	Large Stones
. Woodbridge SEVERE SEVERE Wet	Wet		Slope	
Wet	'RE	MODERATE	MODERATE	MODERATE
		Wet	Wet,	Large Stones,
Percs Slowly	Percs Slowly		Slope	Wet

SLIGHT - limitations are considered SLIGHT if soil properties and site features are generally favorable for the indicated use and limitations are minor and easily overcome.

MODERATE - limitations are considered MODERATE if soil properties or site features are not favorable for the indacated use and special planning, design, or maintenance is needed to overcome or minimize the limitations. SEVERE - limitations are considered SEVERE if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are required. Special feasibility studies may be required where the soil limitations are SEVERE.

### Soils Map

### Scale = 1320'



### **Wetland Resources**

This section includes observations of the wetland resources, the impacts that the proposed activities may have on those resources and recommendations for minimizing these impacts.

Approximately 2.0 acres of the 17.4 acres comprising this parcel have been delineated as inland wetlands. Situated in the northeastern portion of the site, the wetland area is continuous and almost entirely forested. No discernable watercourses were observed on the site. Water from the wetland drains to the northeast into a shallow, excavated ditch running parallel to a rail bed.

According to the proposed site plan, no direct impacts to the wetlands are planned. A "set-back" or "no-build" area, approximately 50 feet wide is proposed adjacent to the wetland boundary. *Possible* indirect impacts to these on-site wetlands include, 1) the discharge of collected stormwater approximately 75 feet from the wetland boundary, after being treated to some degree by passage through a "wet" stormwater detention system; 2) the transmission of untreated effluent from the septic system leach fields into an adjacent stormwater detention area; 3) disturbance of upland areas adjacent to the wetlands; and 4) the deposition of sediment generated from adjacent upland areas during the construction period. Possible impacts to off-site wetlands include reduced water quality and increased water quantities as a result of stormwater discharges. This possibility, according to Ron Rozsa of the DEP Long Island Sound Programs, has the potential to negatively effect the salinity of downstream coastal marshes which eventually receive this stormwater runoff.

Minimalization of these possible indirect impacts to on and off-site wetland areas have been addressed by the applicant in the development plan itself, as well as in Fugro Environmental Consultants Supplemental Report. However, several items need more discussion to further ensure the protection of wetland resources. Many of these issues have been addressed in the Erosion and Sediment, Stormwater Management and Sewage Disposal sections of this report and will not be repeated here. Below are several recommendations which should further enhance protection of wetland resources as it relates to this development proposal.

- 1. On the "General Notes" sheet of the site plan, #4 of the Erosion Control "General Notes" section incorrectly cites the Connecticut Guidelines for Soil Erosion and Sediment Control (the "Guidelines") as the Erosion and Sediment Control Design Handbook. This should be amended.
- 2. The volumes of proposed sediment basins including design calculations and details should be included as part of the plan. Besides the expected sediment storage, the *Guidelines* recommend that sediment basins be designed to handle a 10 year frequency/24 hour duration design storm and provide 10 hours of detention time.
- **3.** The proposed sediment basins have no outlet indicated on the plan view drawing. A stable outlet should be included in any design of a temporary sediment basin.
- 4. The length of the construction entrance is scaled at approximately 80 feet off the plan view drawing, however there is no design length included on the detail drawing of this feature.
- 5. The "Scheduling/Sequence" section of the Erosion and Sediment (E&S) Control Narrative on sheet C-6 should include mention of an on-site, pre-construction meeting with the Town's E&S/wetlands agent as well as the applicant's engineer, contractor and E&S control specialist, at which time a discussion of the E&S plan will take place.
- **6.** The E&S narrative should specifically state that the sediment will be removed from behind sediment barriers once they become more than "half full" of accumulated sediments.
- 7. The proposed hay bale check dams may need upgrading to crushed stone check dams if proven inadequate for expected rain events.
- 8. Planned permanent vegetation including seed mixtures, mulch types, fertilizer requirements and proposed dates should be included on the site plan.
- 9. Item #4 of the "Maintenance" section of the "E&S Control Narrative" on sheet C-6 includes the word "significant" in describing rain fall events which would require inspection of E&S measures while #14 of the "Erosion Control General Notes" does

- not. It is recommended that the word "significant" not be used to avoid confusion.
- 10. Detail #4 on sheet C-7 does not include flared ends 6 and 7 on the specification table. These should be included on the plan.
- 11. There is no oil/grit separator indicated prior to Detention Area #1, however there is an "OS-1" located there. Is this a similar device? If not, it is recommended that a grit/oil separator be located there.
- 12. The wetland boundary should be clearly marked with flagging or construction fence prior to construction.
- 13. It is recommended that the "habitat enhancement plantings" area be enlarged to encompass more of the wetland buffer area.



Fugro East, Inc.

One State Street Suite 2360 Hartford, CT 06103 1990 Aerial Photograph of Proposed Retail Site and Environs Route 166 & U.S. Route 1, Old Saybrook, CT Date: 6/12/95

Figure 2

# **DEP Stormwater Management**

Development of the site for a commercial facility that includes large buildings, paved parking areas and outdoor sales areas will lead to increases in the amount of runoff generated from the site. The potential impacts of increased runoff include downstream flooding and surface water degradation. Considering the amount of land disturbance likely to occur on the site for the commercial activity and the amount of impervious surfaces created, surface drainage on and off site would be expected to change substantially following construction. Although this has been offset somewhat by planning of the industrial park in which the facility is to be situated (particularly by the existence of an off-site detention pond), the site is larger than the boundaries of the industrial park, which would create more impervious surface than the off-site pond was originally designed to handle. A detailed stormwater management plan that includes hydrologic calculations will need to be prepared and reviewed by appropriate town officials.

### **Construction Activities**

The site proposed for development is 17.4 acres. Since this will entail the disturbance of more than five acres for construction Connecticut's General Permit for the Discharge of Stormwater Associated with Construction Activities and Dewatering Wastewaters will cover the project. The Permit requires that the site register with the Department of Environmental Protection (CTDEP). The registrant must then prepare and keep on the site during the construction project a Stormwater Pollution Control Plan (the "Plan").

The Plan must include a site map as described in part VI.B.3.a. of the General Permit and a copy of the erosion and sediment (E&S) plan for the site. The E & S plan that has been approved by the Town in conjunction with the CTDEP Inland Water Resources Division (IWRD) and the local Soil and Water Conservation District may be included in the Plan. This plan must include specifics on controls that will be used during each phase of construction. For areas where greater than five acres will be disturbed at one time, the Plan must show that detention will be available that will store a minimum of 134 cubic yards of water per acre disturbed. The Plan should show that in construction sequencing, installation of controls should have priority.

Maintenance of the E & S controls should be outlined in the Plan, and if any upkeep is required beyond the minimums set in the Connecticut Guidelines for Soil and Erosion Control, all such additional procedures will be described in the Plan as required by the Part VI.B.3.b.(i)(c) of the General Permit. The inspections of all controls should be carried out as defined in Part VI.B.3.c. of the General Permit, and all inspections forms must be kept on site as part of the Plan. Ongoing maintenance and inspections during construction are crucial steps in preventing pollution.

The Plan will describe how any dewatering wastewaters are treated to ensure that they do not discolor or contain suspended solids that would pollute the waters of the State. In particular, if curtain drains are used to divert groundwater from the sedimentation basins, the proposed discharge point for this wastewater should be reviewed carefully to ensure that no downstream flooding will occur, and a Diversion Permit should be obtained from the CTDEP/IWRD if appropriate. Due to the high groundwater table, some dewatering may occur during installation of stormwater management structures, which should be accounted for in the Plan.

### Post-Development Planning

The Plan must describe post-construction stormwater management measures. The detention basins and other retention/detention structures should be designed to maintain flows downstream of the off-site detention pond at pre-development levels, so that flooding problems do not occur and existing flooding problems, if any, will not be further aggravated. It should be clearly demonstrated that, despite the high groundwater table at the site, sufficient runoff can be detained to ensure that the culvert under the Boston Post Road can adequately handle the flow, that existing flooding problems where the culvert decreases in size under the old railroad bed will not be exacerbated, and that the salt marsh will not receive increased freshwater incursion and additional flooding.

In addition to ensuring that there is no aggravation of downstream flooding, the postconstruction stormwater management measures should demonstrate that these structures and controls will meet the goal of 80% suspended solids removal from the site, and that the velocity dissipation devices will be installed as required. This will be assisted by the installation of oil and grit separators (preferably of the vortex design) just before the stormwater runoff discharges into the detention ponds, as well as other measures where necessary. If the off-site pond is going to be incorporated into the plan for meeting this goal, studies should be done to determine the actual volume of the pond. Qualified town and/or state personnel should review the assumptions and methods used in determining removal efficiencies of the stormwater treatment system. They should also review detention basin volume calculations to ensure that the groundwater level has been taken into account.

The post-development management measures must include application to the CTDEP for an NPDES stormwater discharge permit. The CTDEP is currently proposing a commercial stormwater general permit which may be available to cover this facility at completion. The Stormwater Management Plan developed by the the CTDEP Stormwater Section in conjunction with this proposed general permit should be used as an outline for the post-development management plan developed for this site. In particular, this plan should include a maintenance schedule for the oil and grit separators and detention basins.

If the town and/or state requires that stormwater monitoring take place at this site, then an individual stormwater permit will be required for the site. In addition to the monitoring of all stormdrains discharging from the site, monitoring of the runoff from the outdoor sales area may also be required in order to obtain an individual stormwater permit.

A plan and schedule for maintenance of the off-site detention pond should be prepared to assist the Town of Old Saybrook with their responsibilities in the upkeep of this pond.

(The Appendix contains copies of the 1992 General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Constuction Activities and the Draft 1995 General Permit for the Discharge of Stormwater Associated with Commercial Activity.)

# Erosion and Sediment Control and Stormwater Managment

After a thorough review of the reports and plans for the project, as well as a visit to the proposed project site, the following list of concerns and questions pertaining to the project's erosion and sediment control and stormwater management plans has been compiled (Please also refer to DEP Stormwater Management section.)

- 1. Most importantly, a preconstruction meeting should take place on site with representatives of the Town, the construction crew, and assisting organizations such as the Middlesex County Soil and Water Conservation District. The meeting should include a thorough review of the erosion and sedimentation (E&S) controls and provisions for stormwater management on the site. The crew should know who is the person responsible for related problems on site (name should also be on plans) and who to contact at the Town, Conservation District or State level for assistance.
- 2. This is a very large project with a lot of fill being placed on site. It is not clear why there is a need for so much fill on this site. (Drawing C-2 shows up to 12 feet if fill in some locations! What is the quality of the fill for this area?) Based on these conditions, this site will be very difficult to control when it comes to erosion and sedimentation. The Town should consider requiring a cash bond for site stabilization should there be emergencies during the construction of this project.
- **3.** This project should be done in phases with immediate final grading and seeding to reduce exposed surface areas. All spoil piles and stockpile areas should be seeded immediately.
- **4.** Will there be only one construction entrance to the site, as shown on the plan, or will there be several? The location of any others should be shown on the plan.
- **5.** Calculations should be shown for the correct design of the sedimentation basins on site (not the same as for detention basins). Also, design should follow specifications from the Connecticut Guidelines for Soil Erosion and Sediment Control, including restrictions for spillway construction and outlets (should not be on fill).

If the basins are to have such steep side slopes, and the sides are constructed of fill over an impervious till, it may be difficult to establish permanent vegetative cover.

Drainage swales appear to be undersized and they outlet to sedimentation basins without slope protection on 2:1 slopes. This is far too steep for this purpose.

Hay bale dams will not function properly at outlets for basins, which are areas of concentrated flow. They are designed to work in small areas of sheet flow.

- 6. The sediment barriers for this plan are in general inadequate and improperly located for the scale of this project. The Connecticut Guidelines need to be closely followed. An area of special concern is the 1:1 slope along the upper parking lot. Here there are steep slopes of fill very close to the wetland with only a single E&S barrier!
- 7. The plan should show more erosion and sedimentation (E&S) controls at intervals along slope across the proposed parking areas. This will interrupt material transport across these large areas and make erosion control more manageable.
- 8. The checklist in Chapter 4 of the Connecticut Guidelines should also be followed for items such as seeding, seeding dates, fertilizer and mulching for temporary and permanent vegetation. Provisions should be made for dust control in the summer and winter site stabilization if the project runs behind schedule.
- 9. Sedimentation chambers are recommended for installation in the stormwater drainage system at the end of the lines before the detention areas. This would help to extend the life of the detention areas and help keep them from clogging with sediment.

It is unclear based on Figure 9, Drawing C-1O, whether the project planners intend for the proposed "oil and grease separator" to also act as a sediment/grit chamber. The design looks similar to a sedimentation device known as "Vortechnics". It is critical that these devices are sized correctly to handle the anticipated volume of discharge off of the site, otherwise they will not function correctly. Also, a

maintenance schedule for the removal of sediment from these devices should be provided.

- 10. We recommend that a detailed description of the maintenance methods for the catch basins and detention basins be included with the plan. Regular trash collection around the site should be a part of the stormwater management plan. Trash racks should be included on the detention basin outlets.
- 11. The project planners should consider reducing the amount of impervious surface on the site, including the size of the building and the parking lots. Reduction of impervious surface decreases stormwater runoff and related pollutants, increases groundwater recharge, and decreases thermal pollution impacts.
- 12. It is unclear why there is a need for a 36" pipe to connect Detention Areas 1 and 3. It may be better to separate Basins 1 and 3 to separate their peak flows.
- 13. It is important to know the existing volume storage of the off site detention basin. This will be used to determine whether maintenance of the basin should be completed before work gets underway, allowing for the anticipated future volume of stormwater and possible sedimentation. It will also be necessary for the catch basins on Center Road West to be maintained before initiation of this project to allow for full capacity of flow.
- 14. The outlet pipe to Basin 2 is set very low. Will this act to drain the surrounding ground water table including the remaining wetlands just to the north?

# Subsurface Sewage Treatment and Disposal

The proposed retail development will include a 105,553 square foot retail department store and a 6,870 square foot outside sales area resulting in a design flow of 11,240 gallons per day of domestic sewage. It is not anticipated that high water use establishments such as restaurants or laundromats will locate here.

Site testing was performed on the two parcels of land included in the proposed development site. Test pits and permeability tests indicate that both parcels have similar soil conditions, depth to groundwater, and permeabilities. However, the southerly parcel is relatively flat while the northerly parcel has an average slope of approximately 5% making it more suitable for consideration as a leaching area.

Upon analysis of the soil profiles, depth to groundwater, and permeabilities of this site, it was determined that the site is not suitable for a conventional septic system. Therefore, the consulting engineer and the site planners have proposed advanced wastewater treatment via membrane filtration technology, followed by disinfection, and subsequent recycling of approximately 85% of the treated wastewater. The remaining 15% of the treated effluent will be disposed of through a leaching bed placed in a constructed fill section. This treatment technology will limit the type of development.

The treatment plant will consist of the following unit processes: primary settling, biological treatment, membrane filtration, carbon filtration, ultraviolet disinfection, storage of treated wastewater, and distribution of treated wastewater back to the retail facility for use as flush water in toilets. Due to the design flow and complexity of the treatment system, a Discharge Permit from the Department of Environmental Protection is required pursuant to Section 22a-430 of the Connecticut General Statutes and regulations adopted thereunder, as amended.

In accordance with the aforementioned statutes and regulations, the engineer must demonstrate that the system will function hydraulically and that the subject discharge will meet the pertinent Water Quality Standards prior to reaching any surface water bodies, wells, or crossing the applicant's property line. This would

include a system and site hydraulic analysis and an analysis of nitrates, phosphorous, virus and bacterial pathogens.

In this case the advanced treatment system must be designed to meet all necessary requirements, as the majority of the wastewater is to be recycled. A review would also be made to insure that no cross connections are made. The remainder of the wastewater will be discharged to a leach field located in a constructed fill section. As an additional factor of safety, the leach field must be designed to remove virus and bacterial pathogens at a minimum.

Actual construction of any sewage treatment and disposal system approved by the Department of Environmental Protection must be overseen by a professional engineer. Due to the nature of this design full time supervision of construction must take place. Additionally, a detailed construction sequence must be provided and approved in advance to avoid potential construction problems. While the construction of fill sections is technically feasible from an engineering standpoint, and several such systems have been approved and constructed in the past, severe problems can occur during actual construction. These problems could include improper surface preparation, the use of improper fill material, improper fill placement, erosion, etc. Therefore, stringent controls must be placed on the design and construction of such systems.

Once construction of the system is completed, in accordance with plans and specifications approved by the Department of Environmental Protection, a permit to operate the system would be issued. Annual monitoring and maintenance will be required, with the results and verifications submitted annually to the Department of Environmental Protection and the Old Saybrook Health Department. In addition, for a project utilizing alternative treatment such as this, the permit would require that the facility retain a qualified operator.

# Land Use and Planning

The proposed development is located in western Old Saybrook, north of Route 1 (Boston Post Road), and immediately east of Route 166 (Spencer Plain Road). The undeveloped site borders the two main tracks of Amtrack on the north side, and is approximately 1,000 feet south of the Exit 66 interchange of Routes 166 and I-95. Access would be from Routes 166 and 1, as well as from Center Road West, a local road that intersects with Center Road, which in turn intersects with Route 1 east of the proposed development.

The Old Saybrook Plan of Development depicts the area as Economic Development-Mixed Uses which includes highway-oriented retail sales, while the Connecticut River Estuary Regional Plan of Development shows this area at the edge of two categories - the Established Residential category which includes this area and extends east, and the Economic Growth category which extends to the west along the southern side of I-95. The proposed development is located in a B-4 General Business zone which allows retail uses.

Surrounding land uses are commercial, light industrial, institutional and lower density residential north of I-95 along Route 166. A veterinary office, motel and undeveloped land are located on the west side of Route 166, south of I-95. On the east side of Route 166, south of I-95 are four residences, the southern two of which will be removed and land areas incorporated into the parking and access. Two houses will remain on the east side of Route 166 north of the access road to the proposed parking lot. It is understood that the owner of the house immediately north of the proposed parking lot access has life use of it, after which it will revert to the applicant. At that point in time it would be desirable to continue Center Road West to intersect with Route 166 and have parking lot access directly onto Center Road West, rather than onto Route 166. One house will remain on the east side of Route 166, south of the railroad, and west of the proposed treatment facility. Although the site plan proposes evergreen buffering by this property, it is located in the commercial zone, and for the long term, should be utilized for this or some other commercial activity. (A similar situation exists adjacent to a Walmart development in Norwich where former frontal residential uses are located in a commercial zone along a State highway.)

A cafe and transmission repair facility are located at the northeastern intersection of Routes 166 and 1. High density, older residential uses are located between Route 1 and Long Island Sound to the south. Route 1 itself for all practical purposes is a commercial strip with some intervening residential uses. Gradually over time some of these residential uses have been converted to office or commercial uses. For instance, the large former residence immediately east of the proposed driveway intersection of this development with Route 1 is now professional office space. In addition to the commercial uses located east and west of this proposed development along Route 1, commercial and light industrial uses are also located along Center Road. On a land use basis the proposed development should be compatible these surrounding uses.

The site plan presented at the review represents an approximately 14 percent reduction in floor area and should help address some of the concerns raised by Old Saybrook officials. For instance, the separation distance between the leaching area and detention area three has been increased, and parking spaces have been removed east of the proposed building adjacent to the loading areas and detention area #2. The incorporation of the requirements of State regulatory agencies such as the Departments of Transportation and Environmental Protection for concerns such as sewage disposal, road improvements, traffic control/access and storm drainage should help ensure a good development.

### **Traffic and Access Comments**

The Intermodal Planning Office of the Department of Transportation offers the following comments regarding the proposed retail development.

- 1. Tie the access drive off of Spencer Plain Road directly into Center Road West to improve traffic flow through the site.
- **2.** There is the possibility of back-ups occurring on the Route 1 westbound due to vehicles entering the site at the Route 1 driveway. This should be investigated by the traffic engineering consultant.

# **Archaeological Review**

A review of the State of Connecticut Archaeological Site Files and Maps show no known archaeological resource in the project area. However, a prehistoric Native American encampment has been located across the Boston Post Road from the project area. The prehistoric site is small, probably a hunting camp occupation directly adjacent to Hagar Creek. The presence of stemmed, as well as triangular quartz projectile points, most likely spear points indicate that the site may have been occupied over 4,000 years ago.

Field review of the project area indicates that the most sensitive areas for prehistoric archaeological resources are located in the northeastern portion of the property nearest to the wetlands. Portions of the property closer to the intersection of Spencer Plain Road and the Boston Post Road should be less sensitive.

The Office of State Archaeology recommends that any proposed construction in the northeastern portion of the project area should have an archaeological survey prior to land use activities. This survey should locate any cultural resources which might exist there. The Office of State Archaeology is prepared to offer any technical assistance in conducting the recommended survey.

# The Natural Diversity Data Base

The Natural Diversity Data Base maps and files regarding the project area have been reviewed. According to our information, there are no known extant populations of Federal or State Endangered, Threatened or Special Concern Species occurring at the site in question.

Natural Diversity Data Base information includes all information regarding critical biologic resources available to us at the time of the request. This information is a compilation of data collected over the years by the Natural Resources Center's Geological and Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

# Appendix





# GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM CONSTRUCTION ACTIVITIES

October 1, 1992

State of Connecticut
Department of Environmental Protection
Bureau of Water Management

Printed on Recycled Paper

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# GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM CONSTRUCTION ACTIVITIES

### PART I. AUTHORITY

This general permit is issued under the authority of Section 22a-430b of the Connecticut General Statutes, as amended by Public Act 91-263.

### PART II. DEFINITIONS

The definitions of terms used in this general permit shall be the same as the definitions contained in Section 22a-423 of the Connecticut General Statutes and Section 22a-430-3(a) of the Regulations of Connecticut State Agencies. The definition of the term "coastal area" shall be the same as the definition contained in section 22a-94. The definition of the term "high tide line" shall be the same as that contained in section 22a-359 of the Connecticut General Statutes. The definition of the term "coastal tidal waters" shall be the same as the definition contained in section 22a-29 of the Connecticut General Statutes. In addition, the following definitions shall apply:

"Construction activities" means activities including but not limited to clearing, grading, excavation, and dewatering.

"Dewatering wastewater" means wastewater with water generated from the lowering of the groundwater table, the pumping of accumulated stormwater from an excavation, or the pumping of surface water from a coffer dam, or pumping of other surface water which has been diverted into a construction site.

"Fresh-tidal wetland" means a tidal wetland with an average salinity level of less than 0.5 parts per thousand.

"Guidelines" means the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, established pursuant to section 22a-328 of the Connecticut General Statutes.

"Inland wetland" means a wetland as that term is defined in section 22a-38 of the Connecticut General Statutes.

"Municipal separate storm sewer" means conveyances for stormwater(including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) owned or operated by any municipality and discharging directly to surface waters of the state.

"Permittee" means any person who or municipality which initiates, creates, originates or maintains a discharge to the waters of the state; which discharge is covered under this general permit in accordance with Part IV of this general permit.

"Registrant" means a person who or municipality which submits a complete registration in accordance with Part V of this general permit."

"Site" means on the same or geographically contiguous property associated with one project which may be divided by public or private right(s)-of-way.

"Stormwater" means waters consisting of precipitation runoff.

"Tidal wetland" means a wetland as that term is defined in section 22a-29 of the Connecticut General Statutes.

"Upland soils" means soils which are not designated as poorly drained, very poorly drained, alluvial, or flood plain by the National Cooperative Soils Survey, as may be amended from time to time, of the Soil Conservation Service of the United States Department of Agriculture and/or the Inland Wellands Commission of the Community in which the project will take place.

### STORMWATER GENERAL PERMIT FOR CONSTRUCTION, 10/1/92

### PART III. FEES

A fee of \$250.00 for any person and \$125.00 for any municipality shall be paid with the registration required by Part V of this general permit. On and after January 1, 1993, registration and annual fees, if applicable shall be paid in accordance with applicable regulations, including but not limited to Sections 22a-430-6 and 22a-430-7 of the Regulations of Connecticut State Agencies.

### PART IV. COVERAGE UNDER THIS GENERAL PERMIT

- A. CONDITIONS FOR ELIGIBILITY. This general permit covers only discharges comprised solely of stormwater and dewatering wastewater from construction activities which result in the disturbance of five or more total acres land area on a site, provided that the following conditions are met prior to coverage under this general permit.
  - 1. The discharge is not covered by an individual permit issued under Section 22a-430 of the Connecticut General Statutes;
  - 2. The stormwater is not discharged to a Publicly Owned Treatment Works or to ground water,
  - 3. No effluent limitations, standard or guidelines adopted by the U.S. Environmental Protection Agency under the Federal Clean Water Act are applicable to the discharge;
  - 4. The discharge shall not cause pollution due to acute or chronic toxicity to aquatic and marine life, impair the biological integrity of aquatic or marine ecosystems, or result in an unacceptable risk to human health.
- B. GEOGRAPHIC AREA. This general permit covers all areas of the State of Connecticut.
- C. EFFECTIVE DATE AND EXPIRATION DATE. This general permit is effective on October 1, 1992 and expires on October 1, 1997.
- D. EFFECTIVE DATE OF COVERAGE. The effective date of coverage under this general permit is the same as the effective date of the permit listed in Part IV Paragraph C above, or the date construction activities are initiated, whichever is later.
- E. ISSUANCE OF AN INDIVIDUAL PERMIT. Under Section 22a-430b of the General Statutes, when an individual permit is issued to a person or municipality otherwise covered by this general permit, the applicability of this general permit to the individually permitted discharge is automatically terminated on the effective date of the individual permit.

### PART V. REGISTRATION REQUIREMENTS

A. DUTY TO REGISTER. Any person who or municipality which initiates, creates, originates or maintains a discharge described in Part IV Paragraph A of this general permit shall submit to the Commissioner a registration which satisfies the requirements of this part either 30 days after the date of issuance of this permit if the discharge was initiated, created, originated or maintained on or before the date of issuance of this permit, or at least fifteen days before the initiation of construction activities for any other discharge. If the site for which a registration is submitted under this permit is owned by one person or municipality but is leased or, in some other way, the legal responsibility of another person or municipality (the operator), the operator is responsible for submitting the registration required by this permit. The permittee is

responsible for compliance with all conditions of this permit.

- B. SCOPE OF REGISTRATION. A registrant may only include on a registration those discharges which are operated by such registrant on one site. A registrant may not submit more than one registration per site under this general permit.
- C. CONTENTS OF REGISTRATION. The registration shall be submitted on forms prescribed by the Commissioner and shall include but not be limited to the following information.
  - 1. The location of the construction activity for which the registration is submitted. An 8 1/2"x 11" copy of the applicable section of a United States Geological Survey Quadrangle Map showing the boundaries of the construction activity.
  - 2. The landowner's name, address, telephone number and status as federal, state, private, public or other entity.
  - 3. The registrant's name, address, telephone number and status as federal, state, private, public or other entity.
  - 4. The name, address, and telephone number of the general contractor(s) that have been identified at the time of the registration submittal if known. Name and telephone number of the on-site contact person. If unknown at the time of registration, the name and telephone number of the general contractors(s) shall be provided at least 48 hours prior to the start of construction.
  - 5. Stormwater Discharge Information
    - a. Number of existing or proposed outfalls or channelized flows of stormwater from the site;
    - b. Location or proposed location of the outfalls, or channelized stormwater flows discharging from the site shall be shown on the map required in paragraph C.1. above;
    - c. Confirmation of whether any analytical laboratory data exist on stormwater quality for the site.
  - 6. A brief description of the project; estimated timetable including date when contractor began or will begin site disturbance; estimates of the number of acres of the site on which soil have been or will be disturbed; statement that a site-specific erosion control plan has been or will be prepared for the project; and
  - 7. The following certification, signed by an independent professional engineer licensed to practice in Connecticut and not in the regular employ of the registrant or permittee:
    - "I certify that, in my professional judgement, a stormwater pollution control plan has been prepared for the site in accordance with the Guidelines, and the conditions of the General Permit for the discharge of stormwater and dewatering wastewaters from construction activities issued on October 1, 1992, and the controls required by such plan are appropriate for the site. This certification is based on my review of the stormwater pollution control plan for the site and an inspection of the site. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."
  - 8. Any additional information requested by the Commissioner.

### D. SIGNATURE OF REGISTRANT

Any person who or municipality which submits a registration under this general permit shall sign the registration and shall make the following certification:

"I certify under penalty of law that I have read and understand all conditions of the general permit for the discharge of stormwater and dewatering wastewaters from construction activities issued on October 1, 1992, that all conditions for eligibility for coverage under the general permit are met, all terms and conditions of the general permit are being met for all discharges which have been initiated and are the subject of this Registration, and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges covered by this general permit at the site. This document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained in this registration is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowingly making false statements."

E. WHERE TO SUBMIT A REGISTRATION. Persons who or municipalities which submit a registration under this general permit shall submit such registration to the Department of Environmental Protection at the following address:

Department of Environmental Protection Bureau of Water Management Engineering & Enforcement Division 165 Capitol Avenue, Hartford, CT 06106 Attention: General Permit Coordinator

- F. TRANSFER OF COVERAGE. Any coverage under this general permit shall be non-transferable. However, any person registering a discharge which has previously been registered under this permit may adopt by reference the stormwater pollution control plan developed by the previous permittee. The new registrant shall amend the Plan as required by part VI B. 2.
- G. FAILURE TO REGISTER. Any person or municipality who fails to submit a registration, and who initiates, creates, originates or maintains a stormwater discharge to the waters of the State without coverage under this general permit, or who is determined by Commissioner to be discharging without a permit as described in Part V Paragraph C. 6 above, except those covered by an individual permit issued under Section 22a-430 of the Connecticut General Statutes, is in violation of the Connecticut General Statutes, and is subject to injunction and penalties of up to \$25,000 per day per violation under Chapter 446k of the Connecticut General Statutes.
- H. ADDITIONAL NOTIFICATION. For sites covered by this general permit that discharge stormwater associated with construction activity through a municipal separate storm sewer system, a copy of the registration shall also be submitted to the owner and operator of that system.

### STORMWATER GENERAL PERMIT FOR CONSTRUCTION, 10/1/92

# PART VI PERMIT CONDITIONS FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY

### A. SPECIAL CONDITION FOR CERTAIN DISCHARGES

Any person who or municipality which discharges stormwater or dewatering wastewaters from construction activity into coastal tidal waters for which a permit is required under either the Structures and Dredging Act or the Tidal Wetlands Act shall obtain such permit(s).

### B. CONSTRUCTION ACTIVITY STORMWATER POLLUTION CONTROL PLAN.

The permittee shall develop a stormwater pollution control plan ("plan") for each site covered by this general permit and shall perform all actions required by such plan and shall maintain compliance with the plan thereafter. The stormwater pollution control plan shall be designed to address two components of stormwater pollution: (1) pollution caused by soil erosion and sedimentation during and after construction; and (2) stormwater pollution caused by use of the site after construction is completed, including but not limited to parking lots, roadways and the maintenance of grassed areas. Stormwater pollution control plans shall be prepared in accordance with good engineering practices. The plan shall ensure and demonstrate compliance with the guidelines.

### 1. General

- a. For construction activities covered by this general permit which are initiated on or before the date of issuance of this general permit, the permittee shall prepare the stormwater pollution control plan no later than thirty days after the date of issuance of this general permit.
- b. For construction activities covered by this general permit which are initiated after the date of issuance of this general permit, the permittee shall prepare the stormwater pollution control plan no later than fifteen days before the date of initiation of the construction activity.
- c. The permittee shall provide a copy of the stormwater pollution control plan, and the registration set forth in Part V of this general permit immediately upon request to: the Commissioner, the local agency approving sediment and erosion plans, grading plans, or stormwater management plans; or in the case of a stormwater discharge through a municipal separate storm sewer system, the municipal operator of the system.
- d. The Commissioner may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this permit. Within 7 days of such notice the permittee shall make the required changes to the plan, perform all actions required by such revised plan, and submit to the Commissioner a written certification that the requested changes have been made and implemented, and such other information as the Commissioner requires.
- 2. Keeping Plans Current. The permittee shall amend the plan whenever there is a change in contractor or subcontractor at the site, or a change in design, construction, operation, or maintenance at the site, which has the potential for the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the plan or if the actions required by the stormwater control plan fail to prevent pollution.
- 3. Contents of the Plan. The plan shall include the following items:

### STORMWATER GENERAL PERMIT FOR CONSTRUCTION, 10/1/92

### a. Site Description.

- (i) A description of the nature of the construction activity;
- (ii) A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g., grubbing, excavation, grading);
- (iii) Estimates of the total area of the site and the total area of the site that is expected to be disturbed by construction activities;
- (iv) An estimate, including calculations if any, of the average runoff coefficient of the site after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;
- (v) A site map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, areas which will be vegetated following construction, surface waters (including inland wetlands, tidal wetlands, and fresh-tidal wetlands), and locations where stormwater is discharged to a surface water, and
- (vi) The name of the immediate receiving water(s) and the ultimate receiving water(s), and areal extent of wetland acreage on the site.
- b. Controls. Each plan shall include a description of appropriate controls and measures that will be performed at the site to prevent pollution of the waters of the state. The plan shall clearly describe for each major activity identified in the registration submitted under this general permit, the appropriate control measures and the timing during the construction process that the measures will be implemented. (For example, perimeter controls for one portion of the site will be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls will be actively maintained until final stabilization of those portions of the site upgradient of the perimeter control. Temporary perimeter controls will be removed after final stabilization.) The description of controls shall address the following minimum components:

### (i) Erosion and Sediment Controls.

- (a) <u>Stabilization Practices</u>. A description of interim and permanent stabilization practices, including a schedule for implementing the practices. Site plans shall ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Stabilization practices may include but not be limited to: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other vegetative and non-structural measures as may be identified by the guidelines. Where construction activities have permanently ceased or have temporarily been suspended for more than thirty days, or when final grades are reached in any portion of the site, stabilization practices shall be implemented within seven days.
- (b) <u>Structural Practices</u>. A description of structural practices to divert flows away from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from

the site. Such practices include but may not be limited to silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retained systems, gabions, and temporary or permanent sediment basins. Unless otherwise specifically approved in writing, structural measures shall be installed on upland soils.

For common drainage locations that serve an area with more than 5 disturbed acres at one time, a temporary or permanent sediment basin designed in accordance with the guidelines, shall be designed and installed, which basin shall provide a minimum of 134 cubic yards of water storage per acre drained and which basin shall be maintained until final stabilization of the site. This requirement shall not apply to flows from off-site areas and flows from the site that are either undisturbed or have undergone final stabilization where such flows are diverted around the sediment basin.

- (c) Maintenance. Maintenance shall be performed in accordance with the guidelines, provided that if additional maintenance is required to protect the waters of the state from pollution, the plan shall include a description of the procedures to maintain in good and effective operating conditions all erosion and sediment control measures, including vegetation, and all other protective measures identified in the site plan.
- (ii) Dewatering Wastewaters. A description of the operational and structural practices which will be used to ensure that all dewatering wastewaters will not contain suspended solids in amounts which could reasonably be expected to cause pollution of waters of the State. Dewatering wastewaters shall be discharged in a manner which minimizes the discoloration of the receiving waters.
- (iii) Post Construction Stormwater Management. A description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. Unless otherwise specifically provided by the Commissioner in writing, structural measures shall be placed on upland soils. This general permit only addresses the installation of stormwater management measures, and not the ultimate operation and maintenance of such structures included in such measures after the construction activities have been completed and the site has undergone final stabilization.
  - (a) For construction activities initiated after the issuance date of this general permit, the permittee shall install post-construction stormwater management measures designed to remove suspended solids from stormwater. A goal of 80 percent removal of total suspended solids from the stormwater discharge shall be used in designing and installing stormwater management measures. Such measures may include but are not limited to: stormwater detention structures (including wet ponds); stormwater retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on-site; vegetated buffer strips; and sequential systems (which combine several practices).
  - (b) Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions, such as the hydrodynamics present prior to the initiation of construction activities).

### (iv) Other Controls.

- (a) Waste Disposal. A description of best management practices to be performed at the site, which practices shall ensure that no litter, debris, building materials, or similar materials are discharged to waters of the State.
- (b) Off-site vehicle tracking of sediments and the generation of dust shall be minimized.
- c. Inspection. Qualified personnel (provided by the permittee) shall inspect disturbed areas of the construction activity that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater. Where sites have been temporarily or finally stabilized, such inspection shall be conducted at least once every month for three months.
  - (i) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are assessable, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.
  - (ii) Based on the results of the inspection, the description of potential sources and pollution prevention measures identified in the plan shall be revised as appropriate as soon as practicable after such inspection. Such modifications shall provide for timely implementation of any changes to the plan within 7 calendar days following the inspection.
  - (iii) A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the stormwater control plan, and actions taken shall be made and retained as part of the stormwater control plan for at least three years after the date of inspection. The report shall be signed by the permittee.

### d. Contractors

- (i) The stormwater pollution control plan shall clearly identify each contractor and subcontractor which will perform on the site actions which may reasonably be expected to cause or have the potential to cause pollution of the waters of the State, and shall include a copy of the certification statement shown below signed by each such contractor and subcontractor. All certifications shall be included in the stormwater control plan.
- (ii) <u>Certification Statement</u>. The stormwater pollution control plan shall include the following certification signed by each contractor and subcontractor identified in a stormwater pollution control plan as described above:

"I certify under penalty of the law that I have read and understand the terms and conditions of the general permit for the discharge of stormwater associated with construction activity. I understand that as a contractor or subcontractor at the site, I am covered by this general permit, and must comply with the terms and conditions of this permit, including but not

limited to the requirements of the stormwater pollution control plan prepared for the site."

The certification shall include the name and title of the person providing the signature; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

### C. RETENTION OF RECORDS

- 1. The permittee shall retain copies of stormwater pollution control plans and all reports required by this general permit, and records of all data used to complete the registration to be covered by this general permit, for a period of at least three years from the date that construction at the site is completed unless the Commissioner specifies another time period in writing.
- 2. The permittee shall retain a copy of the stormwater pollution control plan required by this general permit at the construction site from the date construction is initiated at the site until the date construction at the site is completed.

### PART VII. GENERAL CONDITIONS

A. The permittee shall comply with the following Regulations of Connecticut State Agencies which are hereby incorporated into this general permit, as if fully set forth herein:

### 1. <u>Section 22a-430-3</u>

Subsection (b) General - subparagraph (1)(D) and subdivision (2), (3), (4) and (5)

Subsection (c) Inspection and Entry

Subsection (d) Effect of a Permit - subdivisions (1) and (4)

Subsection (e) Duty to Comply

Subsection (f) Proper Operation and Maintenance

Subsection (g) Sludge Disposal

Subsection (h) Duty to Mitigate

Subsection (i) Facility Modifications, Notification - subdivisions (1) and (4)

Subsection (j) Monitoring, Records and Report Requirements - subdivisions (1), (6), (7), (8), (9) and

(11) (except subparagraphs (9) (A) (2) and (9) (C)

Subsection (k) Bypass

Subsection (m) Effluent Limitation Violations

Subsection (n) Enforcement

Subsection (p) Spill Prevention and Control

Subsection (q) Instrumentation, Alarms, Flow Recorders

Subsection (r) Equalization

### 2. Section 22a-430-4

Subsection (t) Prohibitions

Subsection (p) Revocation, Denial, Modification

Appendices

### STORMWATER GENERAL PERMIT FOR CONSTRUCTION, 10/1/92

B. The permittee shall comply with the following additional terms and conditions:

Discharge of any substance which is not from the activities described in this general permit shall be considered a violation of this general permit unless it is authorized by an individual permit issued under Section 22a-430 of the General Statutes or another general permit issued under Section 22a-430b of the General Statutes.

- C. The permittee shall at all times continue to meet the conditions for eligibility set forth in Part IV of this general permit.
- D. Within fifteen days after the date the registrant or permittee becomes aware of a change in any information submitted to the Commissioner in a registration or pursuant to this general permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the registrant or permittee shall submit the correct or omitted information in writing to the Commissioner.
- E. Nothing in this general permit shall relieve the registrant or permittee of other obligations under applicable federal, state and local law.
- F. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this general permit by the permittee shall be signed by the permittee and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and believe, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."
- G. Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense under Section 22a-438 of the General Statutes or, in accordance with Section 22a-6, under Section 53a-157 of the General Statutes.

DEPUTY COMMISSIONER





# GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER ASSOCIATED WITH COMMERCIAL ACTIVITY

AUGUST 1, 1995 DRAFT 5/16/95

State of Connecticut
Department of Environmental Protection
Bureau of Water Management

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## GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER ASSOCIATED WITH COMMERCIAL ACTIVITY

### PART I. AUTHORITY

This general permit is issued under the authority of Section 22a-430b of the Connecticut General Statutes, as amended by Public Act 91-263.

### PART II. DEFINITIONS

The definitions of terms used in this general permit shall be the same as the definitions contained in Section 22a-423 of the Connecticut General Statutes and Section 22a-430-3(a) of the Regulations of Connecticut State Agencies. The definition of the term "coastal area" shall be the same as the definition contained in section 22a-94. The definition of the term "high tide line" shall be the same as that contained in section 22a-359 of the Connecticut General Statutes. The definition of the term "coastal tidal waters" shall be the same as the definition contained in section 22a-29 of the Connecticut General Statutes. In addition, the following definitions shall apply:

### "Commercial activity" means:

Any activity or facility under Standard Industrial Classifications (SIC) (as defined in "Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget 1987") 50-59 and 70-79, associated with five (5) acres or more of contiguous impervious surface. Impervious surface means roof area, paved walk, paved parking area, paved driveway, paved roadway and any other paved surface. An activity or facility with an SIC code already covered by the General Permit for the Discharge of Stormwater Associated with Industrial Activity is not included in this definition. See Appendix A for SIC code descriptions.

"Fresh-tidal wetland" means a tidal wetland with an average salinity of less than 0.5 parts per thousand.

"Inland wetland" means a wetland as that term is defined in section 22a-38 of the Connecticut General Statutes.

"Municipal separate storm sewer" means conveyances for stormwater (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) owned or operated by any municipality and discharging directly to surface waters of the state.

"Permittee" means any person who or municipality which initiates, creates, originates or maintains a discharge to the waters of the state, which discharge is covered under this general permit in accordance with Part IV of this general permit.

"Point Source" means any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.

"Registrant" means a person who or municipality that submits a complete registration in accordance with Part V of this general permit.

"Site" means on the same or geographically contiguous property that may be divided by public or private right(s)-of-way.

"Stormwater" means waters consisting of precipitation runoff.

"Stormwater discharge associated with commercial activity" means the stormwater discharge from a point source which discharge is directly related to the commercial activity, access or parking for the site, including but not limited to stormwater discharged from ground surfaces immediately adjacent to the site and its access and parking areas; material

handling sites; refuse sites; sites used for the storage and maintenance of material handling equipment; shipping and receiving areas; manufacturing buildings; storage areas for raw materials, and intermediate and finished products; and areas where industrial or commercial activity has taken place in the past and materials remain and are exposed to stormwater.

"Tidal wetland" means a wetland as that term is defined in section 22a-29 of the Connecticut General Statutes.

### PART III. FEES

A fee of \$250.00 for any facility shall be paid with the registration required by Part V of this general permit. On and after August 1, 1995, registration fees shall be paid in accordance with applicable regulations, including but not limited to Sections 22a-430-6 and 22a-430-7 of the Regulations of Connecticut State Agencies.

### PART IV. AUTHORIZATION UNDER THIS GENERAL PERMIT

- A. REQUIREMENTS FOR AUTHORIZATION. This general permit authorizes only discharges comprised solely of stormwater associated with commercial activity, provided that the following conditions are met prior to coverage under this general permit.
  - 1. The discharge is not covered by a permit issued under Section 22a-430 or 22a-430b of the Connecticut General Statutes;
  - 2. The stormwater is not discharged to a Publicly Owned Treatment Works (POTW) unless such discharge consists only of runoff from areas associated with gardening or nursery materials and such discharge has been approved by the POTW. Portions of the site associated with commercial activity discharging to surface waters or a municipal separate storm sewer are still covered by this general permit.
  - 3. The stormwater is not discharged to ground water. Portions of the site associated with commercial activity discharging to surface waters or a municipal separate storm sewer are still covered by this general permit.
- B. GEOGRAPHIC AREA. This general permit covers all areas of the State of Connecticut.
- C. EFFECTIVE DATE AND EXPIRATION DATE. This general permit is effective on August 1, 1995 and expires on August 1, 2000.
- D. EFFECTIVE DATE OF AUTHORIZATION. The effective date of coverage under this general permit is the effective date of this general permit listed in Part IV Paragraph C above, or the date the commercial activity is initiated, whichever is later.
- E. ISSUANCE OF AN INDIVIDUAL PERMIT. Under Section 22a-430b of the General Statutes, when an individual permit is issued to a person or municipality for stormwater discharges at the site otherwise covered by this permit, the applicability of this general permit to the individual permittee is automatically terminated on the effective date of the individual permit.

### PART V. REGISTRATION REQUIREMENTS

A. WHO MUST SUBMIT A REGISTRATION. Any person who or municipality which initiates, creates, originates or maintains a discharge described in Part IV Paragraph A of this general permit shall submit to the Commissioner a registration which satisfies the requirements of this part either (1) 180 days after the date of issuance of this permit for any discharge initiated, created, originated or maintained on or before the date of issuance of this permit, or (2) for any other discharge, no later than the date the commercial activity is initiated. If an individual facility or activity for which a registration is submitted under this permit is owned by one person or municipality but is leased or, in some other way, the legal responsibility of another person or municipality (the operator), the operator is responsible for submitting the registration required by this general permit. If the

facility or activity for which a registration is submitted under this permit is owned by one person or municipality but is leased or, in some other way, the legal responsibility of more than one other person or municipality, the owner is responsible for submitting the registration required by this general permit. The permittee is responsible for compliance with all conditions of this general permit.

- **B. SCOPE OF REGISTRATION.** A registrant may only include on a registration those discharges that are operated by such registrant on one site. A registrant may not submit more than one registration per site under this permit.
- C. CONTENTS OF REGISTRATION. The registration shall be submitted on forms prescribed by the Commissioner and shall include but need not be limited to the following information:

### 1. Facility Information

- a. Name, address of owner and operator of the commercial facility;
- b. Site address if different from a. above;
- c. Site contact person and phone number at the site;
- d. Primary activity; up to four four-digit Standard Industrial Classification (SIC) codes;
- e. A list of other permits issued by the DEP currently in force for the site, including discharges other than stormwater to the stormwater outlets;
- f. An 8-1/2 x 11" copy of the applicable section of a United States Geological Survey Quadrangle Map or other location map showing the location of site boundaries, stormwater conveyances, outfalls or channelized flows and latitude and longitude, if known.

### 2. Stormwater Discharge Information

- a. Number, type (e.g. swale or pipe), material (e.g. concrete or metal pipe, grass swale) and size of conveyances, outfalls or channelized flows that conduct runoff from the site;
- b. Location of the conveyances, outfalls, channelized stormwater flows discharging from the site shall be shown on the map required in paragraph C.1. above;
- c. If stormwater quality data associated with the site has been collected, a summary of such data;
- d. The name of the immediate receiving water(s), or if the discharge is through a municipal separate storm sewer, the name of the operator of the storm sewer, and the ultimate receiving water(s);
- e. The name of the watershed in which the site is located or the nearest waterbody to which it discharges.

### 3. Any additional information requested by the Commissioner

**D. SIGNATURE OF REGISTRANT.** Any person who or municipality that submits a registration under this general permit shall sign the registration and shall make the following certification:

"I certify under penalty of law that I have read and understand all conditions of the General Permit for the Discharge of Stormwater Associated with Commercial Activity issued on August 1, 1995, and that all conditions for eligibility for authorization under this general permit are met. This document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that the information submitted has been properly gathered and evaluated. The Stormwater Management Plan has been prepared and implemented in accordance with the requirements of this general permit. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained in this registration is, to the best of my knowledge and belief; true, accurate and complete. I am aware that there are penalties for submitting false information, including the possibility of fine and imprisonment for knowingly making false statements."

The registration shall be signed as follows: for a corporation, by a responsible corporate officer or a duly authorized representative thereof, as those terms are defined in RCSA 22a-430-3(b)(2); for a municipality, state, Federal, or other public agency, by either a principal executive officer or a ranking elected official, as

those terms are defined in RCSA 22a-430-3(b)(2); for a partnership or a sole proprietorship, by a general partner or the proprietor, respectively.

E. WHERE TO SUBMIT A REGISTRATION. Persons who or municipalities that submit a registration under this general permit shall submit such registration to the Department of Environmental Protection at the following address:

Central Permit Processing Unit
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

- F. TRANSFER OF AUTHORIZATION. Authorization under this general permit shall be non-transferable. However, any person registering a discharge that has previously been registered under this permit may use as part of such registration the Stormwater Management Plan prepared by the previous permittee. The new registrant shall amend the Plan as required by Part VI. B. 3. prior to submitting a registration.
- G. FAILURE TO REGISTER. Any person or municipality who fails to submit a registration, and who initiates, creates, originates or maintains a discharge to the waters of the State without coverage under a general permit issued under Section 22a-430b of the Connecticut General Statutes or an individual permit issued under Section 22a-430 of the Connecticut General Statutes, is in violation of the Connecticut General Statutes, and is subject to injunction and penalties of up to \$25,000 per day per violation under Chapter 446k of the Connecticut General Statutes.

## PART VI. PERMIT CONDITIONS FOR STORMWATER ACTIVITIES ASSOCIATED WITH COMMERCIAL ACTIVITIES

### A. CONDITIONS APPLICABLE TO CERTAIN DISCHARGES

- Any person who or municipality which initiates, creates, or originates a discharge of stormwater associated
  with commercial activity after the date of issuance of this general permit, which discharge is located less
  than 100 feet from a tidal wetland which is not a fresh-tidal wetland, shall discharge such stormwater
  through a system designed to store the volume of stormwater runoff generated by 1 inch of rainfall on the
  site.
- 2. Any person who or municipality which discharges stormwater into coastal tidal waters for which a permit is required under either the Structures and Dredging Act in accordance with Section 22a-361 of the Connecticut General Statutes or the Tidal Wetlands Act in accordance with Section 22a-32 of the Connecticut General Statutes, shall obtain such permit(s) from the Commissioner.
- B. STORMWATER MANAGEMENT PLAN. The permittee shall prepare, implement and maintain a Stormwater Management Plan (the "Plan") which shall consist of all records, schedules, narrative, instructions or other materials kept on file at the registrant's facility in accordance with the Stormwater Management Measures and other provisions of Part VI of this general permit.
  - 1. Deadlines for Plan Preparation and Implementation.
    - a. For a stormwater discharge associated with commercial activity that is initiated, created, originated or maintained on or before the date of issuance of this general permit, the permittee shall prepare and implement the Stormwater Management Measures as defined below in Part VI.B.2. on or before 180 days after the date of issuance of this general permit and shall maintain this Plan thereafter.

b. For stormwater discharges associated with commercial activity which activity is initiated after the date of issuance of this general permit, the Stormwater Management Measures as defined below in Part VI.B.2. shall be implemented on or before the date such activity is initiated and shall be maintained thereafter.

### 2. Stormwater Management Measures

The Stormwater Management Plan shall be maintained on a form prescribed and provided by the Commissioner and shall, at a minimum, contain the following:

### a. Pollution Prevention Team

The permittee shall designate a pollution prevention team consisting of personnel working at the site to carry out the provisions of these Stormwater Management Measures.

### b. Sweeping

All parking areas, sidewalks, driveways and other impervious surfaces (except roofs) shall be swept clean of sand, litter and any other possible pollutants at least once a month between December 1 and April 30 and every other month at all other times.

### c. Outside Storage

Any raw materials, intermediate products, by-products, final products, waste materials, accessories or equipment stored outside shall be covered or moved inside, if possible, or maintained in such as manner as to avoid, if at all possible, the risk of any of these materials or their residue passing to a stormwater discharge.

### d. Washing

No water resulting from washing of any raw materials, intermediate products, by-products, final products, waste materials, accessories, equipment, storage areas, loading docks, parking areas or vehicles shall be discharged to a stormwater collection system or waters of the state (including, but not limited to, surface waters or wetlands) except in accordance with a permit issued by the DEP pursuant to Section 22a-430 or 22a-430b of the Connecticut General Statutes.

### e. Spill Control

The permittee shall prepare and implement a Spill Control and Response Plan ("Spill Plan") for any raw materials, intermediate products, by-products, final products, waste materials, accessories or equipment present at the facility which could possibly discharge to the stormwater collection system or waters of the state. The Spill Plan shall include measures to avoid spills in areas exposed to rainfall or from reaching areas exposed to rainfall and response measures to best prevent a spill from being exposed to stormwater or entering a stormwater collection system or waters of the state once it has occurred.

The Spill Plan shall identify areas where potential spills can occur and the location of associated collection and discharge points. The Spill Plan shall include procedures for cleaning up spills including, without limitation, procedures for insuring that appropriate personnel are trained or otherwise notified of measures to take in the event of a spill. The necessary equipment to implement a cleanup shall be listed in the Spill Plan and locations designated such that this equipment shall be available to personnel in all areas where spills may occur.

The Spill Plan shall provide that all areas in which liquid chemicals are stored are provided with impermeable containment which will hold at least the volume of the largest chemical container, or 10% of the total volume of all containers in the area, whichever is larger, without overflow from the

containment area. For commercial activities initiated after the date of this general permit, the Spill Plan shall provide that all chemicals in containers of 100 gallons or less shall be stored under a roof that minimizes stormwater entry to the containment area.

The Spill Plan shall also provide that all dumpsters used to store waste or recyclable materials are supplied with attached covers and have drain plugs intact, or are in roofed areas that will keep rain out of the dumpster and will not allow dumpster leakage to enter any stormwater drainage system.

### f. Maintenance and Inspection

The permittee shall prepare and implement a facility maintenance plan. The facility maintenance plan shall include good housekeeping measures to ensure that all areas exposed to stormwater are kept in such a condition as to minimize the possibility of discharging pollutants into a stormwater collection system or waters of the state. The plan shall include provisions for a weekly inspection by a member of the Pollution Prevention Team of all areas covered by the plan and the monthly inspection of all stormwater structures and outfalls on the site for floating or surface debris and sediment. Structures and outfalls shall be cleaned of sediment at least once a year between April 1 and May 1 and at other times as necessary to prevent the discharge of pollutants from structures or outfalls.

### g. Employee Training

The permittee shall ensure that all employees whose activities may affect stormwater quality receive training upon employment and at least once a year thereafter to make them familiar with these stormwater management measures. Training shall be conducted by a member of the Pollution Prevention Team.

### h. Comprehensive Annual Stormwater Evaluation and Inspection

Once a year, a member of the Pollution Prevention Team shall conduct a Comprehensive Annual Stormwater Evaluation and Inspection. All aspects of the stormwater collection and/or treatment system shall be inspected for consistency with the Stormwater Management Plan. A report of the results of this inspection shall be prepared and a copy maintained on site. This report shall also be reviewed and signed by the permittee as specified in Part V, Paragraph D, above. Based on this report, the permittee shall revise the Plan as necessary to maintain consistency with this general permit.

### i. Record Keeping

The permittee shall keep at the site a record of all weekly and monthly inspections, the facility spill control and response plan, sweeping schedule, stormwater structure cleaning schedule, employee training schedule, annual stormwater evaluation and inspection reports and a list of designated Pollution Prevention Team members shall be kept on file at the site. This record shall be made available to the Commissioner for inspection immediately upon request.

### j. Future Construction

The permittee shall ensure that oil and sediment control structures or devices are used within the drainage system for all construction which i) may impact the drainage system and ii) occurs on site on or after the effective date of this general permit. Note that any construction activity that disturbs greater than 5 acres must be registered and conducted in accordance with the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. In addition, the permittee shall avoid, wherever possible, the use of copper or galvanized roofing or building materials for any new construction where these materials will be exposed to stormwater.

### 3. Keeping Plan Current

The permittee shall update the Plan annually and shall amend the Plan whenever; (1) there is a change at the site which may affect the potential of stormwater discharges from the site to cause pollution of the waters of the state; (2) there is a change in the Pollution Prevention Team; (3) the actions required by the Stormwater Management Measures fail to ensure or adequately protect against pollution of the waters of the state; or (4) the Commissioner requests modification of the Plan. The permittee shall amend the Plan as necessary to address any sources or potential sources of pollution identified as a result of a Comprehensive Annual Stormwater Evaluation and Inspection conducted pursuant to Part VI, Paragraph B.2.h. of this general permit. The amended Plan shall be completed and all actions required by the Plan shall be completed within 60 days of the date the permittee becomes aware or should have become aware that any condition identified in this paragraph has occurred.

### C. REPORTING REQUIREMENTS

- The permittee shall make a copy of the Plan available to the Commissioner immediately upon request, and, in the case of a stormwater discharge associated with commercial activity that discharges through a municipal separate storm sewer system, to the operator of the municipal system upon request. In the case of a stormwater discharge associated with commercial activity that discharges to a water supply watershed, copies of the Plan shall be made available upon request to the public water supply company.
- 2. The Commissioner may notify the permittee at any time that the Plan does not meet one or more of the requirements of this Part. Unless otherwise notified by the Commissioner in writing, within 30 days of the date of such notification from the Commissioner, the permittee shall revise the Plan, perform all actions required by the revised Plan, and shall submit to the Commissioner, in writing, certification that the requested changes have been made and implemented and such other information as the Commissioner may require.

### D. OTHER REQUIREMENTS

- 1. The stormwater discharge shall contain no distinctly visible floating scum, oil or other matter except naturally occurring substances such as leaves and twigs provided no person has placed such substances in or near the discharge.
- 2. The stormwater discharge shall not result in pollution due to acute or chronic toxicity to aquatic and marine life, impair the biological integrity of aquatic or marine ecosystems, or result in an unacceptable risk to human health.

### PART VII. GENERAL CONDITIONS

A. The permittee shall comply with the following Regulations of Connecticut State Agencies which are hereby incorporated into this general permit, as if fully set forth herein:

### 1. <u>Section 22a-430-3</u>;

Subsection (b) General - subparagraph (1)(D) and subdivision (2), (3), (4) and (5)

Subsection (c) Inspection and Entry

Subsection (d) Effect of a Permit - subdivisions (1) and (4)

Subsection (e) Duty to Comply

Subsection (f) Proper Operation and Maintenance

Subsection (g) Sludge Disposal

Subsection (h) Duty to Mitigate

Subsection (i) Facility Modifications, Notification - subdivisions (1) and (4)

Subsection (k) Bypass

### DRAFT STORMWATER GENERAL PERMIT FOR COMMERCIAL ACTIVITY. 5/16/95

Subsection (n) Enforcement
Subsection (p) Spill Prevention and Control
Subsection (q) Instrumentation, Alarms, Flow Recorders
Subsection (r) Equalization

2. Section 22a-430-4

Subsection (t) Prohibitions
Subsection (p) Revocation, Denial, Modification
Appendices

B. The permittee shall comply with the following additional terms and conditions:

Discharge of any substance that is not from the activities described in this general permit shall be considered a violation of this general permit unless it is authorized by an individual permit issued under Section 22a-430 of the General Statutes.

- C. The permittee shall at all times continue to meet the conditions for eligibility set forth in Part IV of this general permit.
- D. Within fifteen days after the date the registrant or permittee becomes aware of a change in any information submitted to the Commissioner in a registration or pursuant to this general permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the registrant or permittee shall submit the correct or omitted information in writing to the Commissioner.
- E. Nothing in this general permit shall relieve the registrant or permittee of other obligations under applicable federal, state and local law.
- F. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this general permit by the permittee shall be signed by the permittee and by the individual or individuals responsible for actually preparing such document, each of who shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."
- G. Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense under Section 22a-438 of the General Statutes or, in accordance with Section 22a-6, under Section 53a-157 of the General Statutes

SIDNEY J. HOLBROOK
COMMISSIONER
Date

### APPENDIX A

### LIST OF STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE GROUPS COVERED BY THE GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER ASSOCIATED WITH COMMERCIAL ACTIVITY

If you are unsure of which SIC group you may fall under or require a more detailed description of specific SIC codes within these groups, please contact the Stormwater Permit Coordinator for the DEP at 424-3018. Discriptions are as indicated in the Standard Industrial Classification Manual, 1987, Executive Office of the President, Office of Management and Budget.

- Group 50: Wholesale Trade Durable Goods
- Group 51: Wholesale Trade Nondurable Goods
- Group 52: Building Materials, Hardware, Garden Supply, and Mobile Home Dealers
- Group 53: General Merchandise Stores
- Group 54: Food Stores
- Group 55: Automotive Dealers and Gasoline Service Stations
- Group 56: Apparel and Accessory Stores
- Group 57: Home Furniture, Furnishings, and Equipment Stores
- Group 58: Eating and Drinking Establishments
- Group 59: Miscellaneous Retail
- Group 70: Hotels, Rooming Houses, Camps, and Other Lodging Places
- Group 71: Not assigned
- Group 72: Personal Services
- Group 73: Business Services
- Group 74: Not assigned
- Group 75: Automotive Repair, Services, and Parking
- Group 76: Miscellaneous Repair Services
- Group 77: Not assigned
- Group 78: Motion Pictures
- Group 79: Amusement and Recreation Services

# STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER MANAGEMENT

REGISTRATION UNDER A GENERAL PERMIT CGS SECTION 22a-430b

for

# STORMWATER DISCHARGE ASSOCIATED WITH COMMERCIAL ACTIVITY

DEP USE ONLY

REG.#

PERMIT #

FAC. ID.

type or print neatly  I. Facility Inf	Formation
A. Name and address of owner	B. Name and address of operator
·	
C. Site address	
D. Site contact person	Phone: ( )
E. Standard Industrial Classification (SIC) Code for com (primary # first):(secondary #s if applicable)	-
F. Other DEP Permits currently in force for the site: NP RCRA #, Number and type of other gen	
G. Attach 8 ½" x 11" copy of the applicable section of showing site boundaries and location of all conveyances	
II. Stormwater dischar	rge information
A. Number, type (e.g. swale or pipe) and size of converge off the site:	eyances, outfalls, or channelized flows that run
B. Material of construction, if applicable, of the	conveyances, outfalls, or channelized flows:
	(over)

C. Where does stormwater discharge to?
<ul> <li>Municipal Separate Storm Sewer System? No:Yes: (Name):</li></ul>
D. Name of the watershed where the site is located or nearest waterbody to which it discharges:
E. Have any stormwater quality analytical data been previously collected? No:Yes: (If yes, maintain data from past three (3) years on site.)
F. Has this site been previously registered by a different permittee? No:Yes: If yes, name of previous permittee:
III. Certification
I certify under penalty of law that I have read and understand all conditions of the general permit for the discharge of stormwater associated with commercial activity issued on August 1, 1995, and that all conditions for eligibility for coverage under this general permit are met. This document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained in this registration is, to the best of my knowledge and belief; true, accurate, and complete. I am aware that there are penalties for submitting false information, including the possibility of fine and imprisonment for knowingly making false statements.
Name of Registrant (please print)  Title
ignature Date
Fee attached \$ A fee of \$250.00 for any facility shall be paid with the registration. (Make our check payable to the Department of Environmental Protection and annotate check: Water Management Permit fee.) State and Town owned facilities are not required to pay a registration fee.
Mail registration, location map, and fee to:
Central Permit Processing Unit Department of Environmental Protection 79 Elm Street

Hartford, CT 06106-5127

# ABOUT THE TEAM

The Eastern Connecticut Environmental Review Team (ERT) is a group of professionals in environmental fields drawn together from a varety of federal, state and regional agencies. Specialists on the Team include geologists, biologists, foresters, soil specialists, engineers and planners. The ERT operates with state funding under the supervision of the Eastern Connecticut Resource Conservation and Development (RC&D) Area — an 86 town region.

The services of the Team are available as a public service at no cost to Connecticut towns.

# PURPOSE OF THE TEAM

The Environmental Review Team is available to help towns and developers in the review of sites proposed for major land use activities. To date, the ERT has been involved in reviewing a wide range of projects including subdivisions, landfills, commercial and industrial developments, sand and gravel excavations, elderly housing, recreation/open space projects, watershed studies and resource inventories.

Reviews are conducted in the interest of providing information and analysis that will assist towns and developers in environmentally sound decision-making. This is done through identifying the natural resource base of the project site and highlighting opportunities and limitations for the proposed land use.

# **REQUESTING A REVIEW**

Environmental reviews may be requested by the chief elected official of a municipality or the chairman of town commissions such as planning and zoning, conservation, inland wetlands, parks and recreation or economic development. Requests should be directed to the chairman of your local Soil and Water Conservation District and the ERT Coordinator. A request form should be completely filled out and should include the required materials. When this request is approved by the local Soil and Water Conservation District and the Eastern Connecticut RC&D Executive Council, the Team will undertake the review on a priority basis.

For additional information and request forms regarding the Environmental Review Team please contact the ERT Coordinator: 203-345-3977, Eastern Connecticut RC&D Area, P.O. Box 70, Haddam, Connecticut 06438.