Mitigated Determination of Non-Significance
for
Expansion of Cedar Grove Composting Inc.
Processing Capacity

Date of Issuance:	October 13, 1999
Project:	This is a request for an expansion of feed stock processing capacity through the addition of one primary composting zone 7 and additional exhaust capacity to the tipping building's air capture and biofilter treatment system.
Location	17825 Cedar Grove Road Maple Valley, WA 98038
Proponent:	Jerry Bartlett – General Manager Cedar Grove Composting Inc. 54 South Dawson Street Seattle, WA 98134
Puget Sound Clean Air Agency Permit	Notice of Construction Order of Approval No. 7638
Puget Sound Clean Air Agency Contact:	Claude M. Williams, P.E. Air Pollution Engineer II (206) 689-4066
Seattle King County Dept of Public Health Permit	1999 Non-Conforming Solid Waste Handling Permit, Dated December 18, 1998
Seattle King County Dept of Public Health Contact	Greg Bishop, Program Supervisor (206) 296-4785

Notes:

1) This finding is based on review of
   a) The November 12, 1998 Notice of Construction Application for Approval to the Puget Sound Clean Air Agency;
   b) The November 12, 1998 SEPA checklist, and the revised September 16, 1999 SEPA Checklist.
   c) Changes to the facility's Environmental Management System received November 12, 1998;
   d) Public Comments received between March 3 and April 3, 1999 on the draft Determination of NonSignificance;
   e) Cedar Grove Composting Inc's response to public comment dated May 12, 1999;

f) The existing NPDES permit No. SO3002487 dated December 18, 1995,
g) State of Washington Dept of Ecology Certificate of Water Right No. Gl-24976P dated February 6, 1987; and
h) State of Washington Dept of Health Water Facilities Inventory No. 264611 dated January 31, 1996.

2) Issuance of this threshold determination does not constitute approval of any permit. This proposal will be reviewed by the Seattle-King County Department of Public Health and the Puget Sound Clean Air Agency for compliance with their regulations.

3) On December 18, 1998, the Seattle-King County Department of Public Health issued a Non-Conforming Solid Waste Handling Permit for Cedar Grove Composting, Inc., for 1999, which includes retention of intake volumes at 1998 levels. As of this writing, Cedar Grove Composting had filed an appeal of the Dept of Public Health permit with the Pollution Control Hearings Board (PCHB). In its appeal, the facility requested that it be allowed to increase the capacity. In reviewing the Notice of Construction Application and accompanying SEPA documents, the Puget Sound Clean Air Agency considered the possibility that Cedar Grove Composting would win its appeal.

4) Water drawn from the aquifer well Number 264611 will be used for domestic purposes and for equipment cleaning. A permit condition will be added to the Clean Air Agency's Order of Approval, to require that the facility not use the aquifer water for feedstock preparation or for moisture addition anywhere in the composting process. To eliminate the largest use of water onsite, the facility is also being required in a permit condition to pave the entry road to the facility. Previously, in order to control fugitive dust during the warm months, water had to be sprayed from a tanker truck to keep the surface moist.

5) King County has not established any wetlands within catchment basin CH2 other than Tributary 316 A. This seasonal creek, which eventually runs to the Cedar River, does not cross the facility. None of the construction or operational activities will affect the flows or contents of this creek as no water is discharged from the 26-acre operational area to the creek.

6) The current system of three leachate/storm water retention ponds contains 854,000 cubic feet of storage. Facility runoff is designed to be confined onsite for reuse or discharge to the METRO/King County sewer system. Excess storage is provided for a 10-year, 365-day storm. This exceeds the Department of Ecology 6-month, 24-hour standard. The retention ponds are permitted by METRO/King County to discharge 0.3 cubic feet per second to the sanitary sewer system. Storm overflow that cannot be handled by the existing retention pond system or wastewater treatment system discharge, is permitted under the Washington State NPDES permit for Cedar Grove Composting, to be piped and discharged to Wetland 3113 (Queen City Lake), which is not in the catchment basin.

These lakes have no outlet to other surface waters. Therefore, all surface water created during the construction and operation of Zone 7 can be dealt with in the existing system. It should be noted that during the 1998/1999 La Nina storm events the facility did not need to make a discharge into Wetland 3113.

Should electricity be lost to the facility for less than 48 hours, the retention capacity of the ponds can handle the loss of pumping ability to the sanitary sewer. During the rainy season a loss of electricity for periods greater than 48 hours can be handled through rental generators for the pumps or by using rental tanker trucks that can take pond water to the wastewater treatment plant.

Expected storm water volume will decrease by 500,000 gallons per year with the new zone in place, because the composting zones are net water users.

As a permit condition in its Puget Sound Clean Air Agency Order of Approval, the facility is required to submit, and receive Agency approval for, changes in its Environmental Management System (EMS). Agency approval is required prior to first placement of feedstocks on Zone 7. These changes will include procedures for managing and maintaining its storm water retention capacity and the backup tanker pumping system it will use when those procedures fail due to weather.

Past impacts to drainage basin flows from storm water retention at the existing 26-acre pad were approved by King County in the grading plan of 1989-90. The existing storm water treatment system is documented in the EMS, NPDES Storm Water Discharge Permit, and the Industrial Waste Discharge Permit. Since the site no longer discharges into the seasonal creek, there will be no changes in the quantity or quality of flow into the creek to the Cedar River drainage basin due to the addition of Zone 7.

7) Because of the seasonal nature of the stream adjacent to the facility, it is not being used by salmon or by waterfowl. Since Cedar Grove Composting does not discharge to this stream, there will be no changes in the drainage to this basin for this project that would improve or detract from the ability of this stream to support animal migrations.

8) There were significant adverse odor impacts in the past from the use of some composting technologies. However, the removal of one type of control technology (air scrubber system) and the success of the new Environmental Management System has proven that the current technology is effective in mitigating adverse odor impacts. The emissions of concern are ammonia and odor-generating molecules generally classified as mercaptans and organic acids. Ammonia has an odor threshold of 5 parts per million and is generated in amounts higher than the threshold in the feedstocks that arrive onsite. The ammonia is easily handled by the existing tipping building, which captures the ammonia and routes it through a biofilter. The system capture effectiveness and the biofilter's removal efficiency are such that the ammonia in the exhausts is undetectable as an odor. The mercaptans and organic acids, however, have odor thresholds as low as 1 part per billion and can be produced by incoming feed stocks as well as upset conditions in the composting process. Though the amount of objectionable odor emitted in the course of one year can be measured in pounds, not tons, per year, it is these odors around which much of the system design and management practice improvements have evolved. In the early years of operation it was found that natural air dilution could not be depended upon to reduce odors below their odor thresholds before they left the facility. In response, Cedar Grove Composting has established a system that draws outside air through the piles in order to keep the piles aerobic (with

sufficient oxygen), thus reducing the production of these objectionable odor compounds, and to capture any foul air that is produced. The foul air is then cooled and routed through biofilters to remove the objectionable odors. Biofilters have been proven both in Europe and the United States as a dependable method for the removal of odors. The proposed project will add another air capture system to the existing pad for the new zone. The exhausts will be routed through an existing biofilter that has excess capacity that can be used to treat the odors.

Because the acceptance of feedstocks in excess of the facility's ability to process can result in the release of greater than normal quantities of odorous emissions, a permit condition will be added to the Puget Sound Clean Air Agency Order of Approval. This condition requires the facility to certify during the first quarter of each year till 2002 that they have contracts that will allow the facility on short notice to divert excess feedstocks to other composting facilities.

9) Motor vehicle traffic is expected to decrease due to an unrelated project by Cedar Grove Composting to establish compost drop boxes outside of the main facility. This will result in fewer individuals and small businesses traveling to the main facility to drop off green waste.

Threshold Determination

The responsible official finds that the above described proposal does not pose a probable significant adverse impact to the environment, provided the mitigation measures listed below are applied as conditions of permit issuance.

This finding is made pursuant to RCW 43.21C, Chapter 197-11 WAC and the Puget Sound Clean Air Agency Board of Directors Resolution No. 565 after reviewing the environmental checklist as revised, public comments received, and other information on file with the lead agency and considering mitigation measures which the Agency or the applicant will implement as part of the proposal. The responsible official finds this information reasonably sufficient to evaluate the environmental impact of this proposal.

Mitigation List

The following mitigation measures shall be attached as conditions of permit issuance. These mitigation measures are consistent with the policies, plans, rules or regulations designated by the Puget Sound Clean Air Agency Board of Directors Resolution No. 565 as a basis for the exercise of substantive authority and in effect when this threshold determination is issued. Key sources of substantive authority for each mitigation measure are in parentheses; however, other sources of substantive authority may exist but are not expressly listed.

To offset the impacts referenced above, the following mitigation is required:

Water Rights

Permit conditions are needed to reduce the possibility that facility water usage may cause contamination under Queen City Farms to migrate into the water supply. Therefore, it will be required that;

1. Cedar Grove Composting shall only use water drawn from Aquifer Three, in accordance with the facility's current water right permit. Cedar Grove Composting shall not use water drawn from Aquifer Three in the preparation of feedstocks, nor for moisture addition at any time during the composting or curing process.

2. To eliminate the facility's largest water usage, within 30 days from the issuance date of the Puget Sound Clean Air Agency approval, Cedar Grove Composting shall completely pave the main site access road to reduce fugitive dust.

(Puget Sound Clean Air Agency Board Resolution No. 565, Section 14 and WAC 197-11-660)

Water Discharge

Permit conditions are needed to reduce the possibility that storm water discharges from this facility may overwhelm the retention capacity of Wetland 3113 (Queen City Lake). Therefore, it will be required that;

1. Cedar Grove Composting shall not discharge to any surface water from its retention ponds, without notification to the Washington Department of Ecology as delineated in its NPDES permit.

2. Within 30 days from the issuance date of the Puget Sound Clean Air Agency approval, Cedar Grove Composting:

   Shall submit for the Puget Sound Clean Air Agency approval, the following changes to the Environmental Management System (EMS) manual:

(1) Describe the procedures that will be used to manage and maintain storm water retention capacity during the various seasons, while using published long range precipitation forecasts, so as not to exceed the King County METRO wastewater discharge permit limits, the Cedar Hills Landfill force main discharge allotment, or the NPDES permit discharge limits.

(2) Describe the backup truck pumping and transport procedures for excess storm waters, to be used in the event that the Cedar Hills Landfill force main allotment is reduced or eliminated, and for periods when electricity is lost after a storm event.

(Puget Sound Clean Air Agency Board Resolution No 565, Section 14 and WAC 197-11-660)

Comments and Appeals

Pursuant to the Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon the Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Mitigated DNS.

Comments may be made to the Agency on this Mitigated DNS. Such comment will be received and entered into the record for 14 days from the issuance of this Mitigated DNS.

Appeal deadline:	4:30 PM on October 27, 1999
Address for comment:	Attention: Claude Williams Puget Sound Clean Air Agency 110 Union St, Suite 500 Seattle, WA 98101
Responsible Official Position/Title Date 10/13/99	Dennis J. McLerran Air Pollution Control Officer Signature David O. Kwiat for DJM