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HENNEPIN COUNTY RESOURCE RECOVERY PROJECT  
ENVIRONMENTAL IMPACT STATEMENT  
SCOPING DECISION DOCUMENT

NOT FILMED

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## BACKGROUND AND PURPOSE

The rules of Minnesota's Environmental Quality Board (EQB) require that an environmental impact statement (EIS) be conducted for any resource recovery facility which will process 500 or more tons of waste per day and that an environmental assessment worksheet (EAW) be prepared for any transfer station that will handle over 300,000 cubic yards of waste per year (6MCAR 3.038). The Metropolitan Council has agreed to act as the responsible government unit (RGU) for the environmental review of Hennepin County's proposed resource recovery facility and transfer station system.

Hennepin County has proposed to construct a 1,000 ton-per-day resource recovery waste-to-energy facility and a system of four solid waste transfer stations. The resource recovery facility would be located in Minneapolis at 7th St. N. and 6th Av. N., known as the Greyhound site location. The recovery facility would use either the mass burn or refuse derived fuel (RDF) technology and cogenerate steam and electricity. The transfer stations would be located at sites in Bloomington, Brooklyn Park, Hopkins and Minneapolis. An EIS is mandatory for the resource recovery facility; Hennepin County has also requested that the EIS include the transfer station system since it is integral to development of the resource recovery facility.

EQB rules require a public scoping process for any EIS (6 MCAR 3.030). This process narrows the scope and bulk of the EIS by identifying those issues relevant to the proposed project which require more detailed analysis and by restricting studies in the EIS to those discussed in the scoping decision document.

The Council has prepared an EAW for the Hennepin County Resource Recovery Project, in accordance with EQB rules, as the basis for the scoping process. Public scoping meetings were held April 29 and 30, 1985, and a comment period concerning the scope was open through May 8, 1985.

This document represents the Council's decision on what issues should be addressed to complete an adequate EIS on the project. This scoping decision is to be the basis for preparing the EIS and for evaluating its adequacy.

The purpose of the EIS is to function as a means of disclosing information about the significant environmental issues associated with a proposed action. The document is not intended to justify either a positive or negative decision on the project, but can be used as a guide in issuing or denying permits or approvals for the project and in identifying measures necessary to avoid or mitigate adverse environmental effects and to restore or enhance environmental quality.

## PREPARERS

It is expected that the EIS will be prepared by a consultant acting under the direction of the Council staff. Arrangements may also be made to obtain assistance from other governmental agencies such as the Minnesota Pollution Control Agency (MPCA), Minnesota Department of Health or Minnesota Department of Natural Resources.

## CALENDAR

An EIS preparation notice for this project must be published in the EQB Monitor within 45 days of adoption of this scoping decision. A draft and a final EIS must be prepared and released for public review and the Council must make a determination of adequacy for the final EIS within the following 280 days. At present, the expected calendar for this EIS includes publication of the preparation notice on or before July 29, 1985; release of a draft EIS by early fall 1985; release of a final EIS by the end of the calendar year and completion of the adequacy determination early in 1986.

## INTRODUCTION

The EIS will contain a description of the resource recovery facility and transfer station system that Hennepin County is proposing to develop. The elements of that description are outlined below:

- a) Purpose of the resource recovery facility and transfer station system;
- b) Proposed location and existing characteristics of the sites;
- c) Conceptual diagrams and site layouts showing major equipment and features of the facility and of each transfer station;
- d) For each site, identification of the general specifications for equipment and operation, including utilities, buildings, processing and recycling equipment, pollution control equipment and labor;
- e) Design and operating capacities and capacity for expansion;
- f) Schedule for planning, design, shakedown, and operation; and
- g) Contingency plans during facility down time.

In addition, the following descriptions will be presented on the resource recovery facility:

- a) The technologies proposed to process and recover waste materials;
- b) The combustion technology used to produce steam;
- c) The technology used to generate electricity;
- d) Products, including average annual and maximum daily volumes of each product and their characteristics;
- e) Markets identified for recovered materials, including RDF and markets that have been identified for potential steam sales;
- f) Steamline routes and characteristics for typical segments (for example, size of steam and condensate piping);
- g) Steamline characteristics for areas requiring special design, for example, beneath roadways, at bridges, within other utility corridors, etc.;
- h) Proposed transmission line routes and transmission line characteristics including the line voltage, construction techniques, and typical design;

- i) Description of residues (physical and chemical characteristics) that will be generated and disposal plans.

## ALTERNATIVES

The alternatives section of the EIS must evaluate reasonably available options for implementing the proposed project as well as assessing the consequences of a "no-build" situation. Typical alternatives range from design modifications, different technologies, or changes in size to consideration of different potential sites.

For this EIS, the alternatives which will be evaluated are listed below:

- a) Resource Recovery Facility: design modifications including changes to site layout, combustion technology alternatives (mass burn and RDF) and alternative steamline and transmission line routings. Changes in size will be evaluated if other measures are not available to mitigate adverse impacts.
- b) Transfer Stations: design modifications including changes to site layout and at least five other sites within a five-mile radius of the proposed site. Changes in size will be evaluated if other measures are not available to mitigate adverse impacts.
- c) No-Build: construction of resource recovery facility without transfer station system, identification of other waste management methods which could achieve some or all of the purposes of the proposed project if neither the recovery facility or transfer stations are built, discussion of other resource recovery projects that could reasonably be located to provide steam to major potential markets within the Minneapolis central business district.

The alternatives evaluations will utilize existing information such as national assessments of alternative resource recovery technologies assessments, site evaluations prepared by the county, and local and regional solid waste management plans. Existing information will be reviewed and summarized in the EIS. New data and studies to be developed in the EIS are indicated under the impact analysis sections which follow.

## GOVERNMENTAL APPROVALS

The EIS will list all known governmental permits and approvals required for the project and the unit of government responsible for each action. The EIS will not be prepared with the intent to supply all necessary data for any particular permit application. A record of decision should be kept for the following potential future permitting actions showing how the EIS was considered in making the decision.

<u>Agency</u>	<u>Permit Decision</u>
MPCA	Solid waste facility approval
MPCA	Air Quality Installation Permit
Metropolitan Council	Solid waste facility approval
Hennepin County	Facility operating license
Municipality where either transfer station or recovery facility is located.	Required zoning approvals



## IMPACT ANALYSIS

The EIS must discuss environmental, economic, employment and sociological impacts for the project and each major alternative. Direct, indirect, adverse or beneficial impacts are to be identified.

Each major issue area which will be evaluated for the proposed project is enumerated below with emphasis given to those issues that appear most significant.

### ENVIRONMENTAL IMPACTS

#### Air Quality

Air quality impacts can originate during construction, from traffic, and from odors at the resource recovery facility and transfer stations. Dust can be generated during the waste transfer and resource recovery process. Combustion of waste will result in air emissions also.

Site preparation work for the recovery facility and transfer stations (including steamline placement for the resource recovery plant) will generate dust. Traffic disruption and construction equipment can also result in air emissions during construction. The EIS will address dust impacts and air emissions during site preparation and construction. Mitigation measures will be discussed.

Air quality impacts from traffic associated with operation of the recovery facility and transfer stations are most likely to occur if there are congestion problems at points of access and egress to the sites and to the local and the regional roadway systems. Carbon monoxide is the pollutant of greatest concern. Ambient concentrations will be estimated in the vicinity of proposed access roadways and along potential alternative routes.

Potential odor sources to be addressed are odors from waste transfer points, the tipping floor of the resource recovery facility or from storage of RDF or combustion by-products.

Waste transfer and processing waste during resource recovery generates dust. The EIS will evaluate proposed design and operational dust control measures.

Waste processing and combustion facilities can present an explosion risk. The magnitude of this risk will be addressed in the EIS, as will the value of potential mitigative measures.

The proposed resource recovery facility will combust raw waste or RDF on-site. The EIS will include information on the regulatory process governing waste combustion and will discuss air quality issues associated with waste combustion. The EIS will discuss the likely health significance of the emissions, as well. In particular, the EIS will discuss for the Greyhound facility:

- a) Existing regulatory environment including attainment status of project area, nonattainment requirements, prevention of significant deterioration (PSD) requirements and emission control technology proposed for the facility.
- b) Existing ambient air quality data, and information on existing significant point sources.

- c) Estimated operating parameters for the facility including emission rates for the boiler, and associated equipment.
- d) Impacts of EPA criteria pollutants emitted from the proposed facility in significant amounts (will be modeled).
- e) Noncriteria pollutants emission factors and predicted concentrations (the Michigan framework Review of Noncriteria Emission Sources will be used to assess exposure and risk).
- f) Any ongoing air quality monitoring programs related to the project to the extent available.
- g) Modeling information will be used to compare the facility and other sources against existing state and federal air quality standards and to evaluate the cumulative air quality impacts on the downtown Minneapolis area.
- h) Potential air quality impacts resulting from increased truck traffic associated with the proposed project.
- i) Measures to control odors including a review of the odor controls at other resource recovery facilities.
- j) Mitigation measures will be described.

Based on the demographic characteristics of the areas surrounding the recovery facility site, a health risk assessment will provide a qualitative and quantitative description of the potential risk to sensitive persons.

Data available on comparable facilities will be used to address the issue at workplace safety. The EIS will include:

- a) Available cancer rate data for the area adjacent to the Greyhound facility.
- b) Information of exposure pathways;
- c) A list of pollutants which may be important to evaluating human health effects;
- d) Available data on exposure rates developed from other similar projects;
- e) Information on the potential health effects of important pollutants utilizing available data on health effects of such pollutants.
- f) Mitigation measures.

### Noise

Traffic and on-going operation of the transfer stations and recovery facility will generate noise. To assess the impact of the noise, background noise levels will be monitored and future noise levels will be estimated. The estimates will include noise from traffic and site operation. The EIS will include:

- a) Available noise data;
- b) Background noise monitoring conducted at each of the sites;

- c) Available noise information from other resource recovery facilities and transfer stations;
- d) Information on potential noise sources and noise characteristics including noise from construction traffic and operation of the sites;
- e) Modeling of potential noise from each site;
- f) Identification of impacts based on comparison with MPCA noise regulations;
- g) Potential for vibration impacts resulting from construction on site operation;;
- h) Potential mitigation measures will be discussed.

### Geology

The surficial and subsurface characteristics will be described for each site.

Surficial soil types will greatly affect the potential for soil erosion during construction phases. Any special measures needed to minimize soil erosion will be discussed.

- a) Background information on existing conditions at the proposed sites will be collected including information on bedrock geology, soils and upper geologic deposits, surface hydrology and groundwater.
- b) The impacts of proposed site development will be evaluated as will any constraints posed by each site's resource characteristics.
- c) Mitigation measures will be discussed.

### Habitat Change

Information from the Department of Natural Resources, along with limited on-site assessments, will be used to characterize the species of plants and animals likely to exist on the recovery and transfer station sites.

In addition, the EIS will discuss a) existing terrestrial ecology resources of the recovery facility or transfer station site areas (this data will be developed from information available from the Minnesota National Heritage Survey with on-site assessments for confirmation) and b) the potential for the occurrence of any rare, endangered or threatened plant and animal species on the sites (this data will be developed from information available from the Minnesota National Heritage Survey).

The Brooklyn Park site is located near a state protected wetland. Impacts on the wetland will be evaluated, including any loss of wildlife habitat.

### Water Quality

The recovery and transfer stations facility could impact surface waters in several ways. The potential for increased soil erosion and attendant water quality degradation due to site preparation work will be addressed. Changes in surface water drainage patterns due to site development will also be identified.

Other potential avenues of surface water impact are: 1) site layout and design, and 2) storage areas for incoming and residual waste materials. The adequacy of site designs and layouts to control spills of incoming materials will be studied. The availability of appropriate storage areas for processed materials at the resource recovery facility will be included. Water supply demand for each site will be discussed.

In addition, all of the sites will be evaluated for:

- a) Background information on water use and discharge characteristics; b) Impact on capacity of wastewater and water supply facilities; c) The need for potable water and make-up water; and d) Mitigation measures, erosion and run-off control.

A portion of the Brooklyn Park transfer station site has been identified as being within a 100-year floodplain. The EIS will evaluate the extent of the floodplain on the site, the relationship of buildings to the floodplain boundary, and the degree to which the proposed project would conform to relevant local controls and state shoreland standards.

### Waste Management

The resource recovery facility will generate ash. The EIS will contain information on the regulatory process governing ash disposal and will discuss issues associated with ash disposal. The likely chemical composition of the ash, the potential quantities generated and the potential for the ash to result in groundwater contamination after disposal will be described. Mitigating measures will be discussed.

If the recovery facility is developed using the RDF technology, other residual wastes from processing could be produced. The EIS will describe such materials and discuss disposal requirements as well as possible uses for the materials.

Storage and handling needs associated with materials recovery at the transfer stations and the resource recovery facility will be described and evaluated in the EIS.

Not all wastes received at the transfer station or the resource recovery facility will be processible or recoverable. Storage, handling, and disposal needs associated with such waste materials will be described in the EIS. Proposed measures to identify, isolate, and remove hazardous waste materials will be discussed.

### Transportation

The volumes and types of traffic to the recovery facility and transfer stations facilities will be identified. Primary and secondary access routes will be evaluated for safety, turning movements, and grade. The adequacy of or impact on local and regional roadway systems will be addressed for a design year and also for a future point in order to consider the combined effect of traffic from the proposed facilities and other development expected to occur nearby. The EIS will also evaluate: a) the effect truck traffic may have on diverting other traffic; b) potential for queuing of truck traffic to occur and its impact; c) impact future development will have on traffic and traffic patterns; and d) effect on other proposed transportation systems.



The proposed access to the Hopkins site would require crossing railroad tracks. The impact trains would have on access and truck traffic would be evaluated.

## ECONOMIC AND EMPLOYMENT IMPACTS

The EIS will discuss expected costs and employment opportunities associated with the construction phase of the recovery facility and transfer stations, as well as impacts from on-going operations (such as job opportunities and potential revenues). Concerns regarding impacts on property values or nearby commercial development will be discussed.

The potential for the project to induce or adversely impact nearby development will be assessed. Developments that could benefit from the facilities will be identified. The EIS will evaluate fiscal impacts on affected local communities including impact on tax base and community services and facilities that may have to be provided, such as water supply, sewage treatment, fire protection and law enforcement.

### Local and Regional Planning

The EIS will discuss regional and local plans and requirements in effect for the transfer station sites, recovery facility and steam and transmission lines. Compatibility with nearby land uses will be assessed, as will the degree to which the development may require refinement or modification of plans for services and utilities will be assessed and possible mitigating measures identified.

## SOCIOLOGICAL IMPACTS

### Aesthetics

The EIS will discuss the compatibility of the recovery facility and transfer stations with surrounding development in terms of visual impacts. The EIS will include:

- a) An evaluation of existing visual characteristics of the area;
- b) Evaluation of visual impacts of transfer station development, the recovery facility and of any proposed transmission line;
- c) Graphics will be used to present existing visual resources and to show impacts; and
- d) Discussion of mitigation measures.

### Historical/Archeological

Historical and archeological resources of significance do not appear to exist on the sites under consideration. The resource recovery facility site and the Minneapolis, Hopkins and Bloomington East transfer station sites are in previously disturbed industrial areas. An on-site archaeological survey will be conducted at the Brooklyn Park site because of the site's proximity to Shingle Creek.