# BEFORE THE COUNCIL OF THE METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF APPROVING THE	) Resolution No. 89-1153
SUBMISSION OF A REVISED CLOSURE	<b>)</b>
AND FINANCIAL ASSURANCE PLAN FOR	) Introduced by Rena Cusma
ST. JOHNS LANDFILL TO THE OREGON	) Executive Officer
DEDARMENT OF ENVIRONMENTAL OHALTY	ì

WHEREAS, The Metropolitan Service District desires to close the St. Johns Landfill using methods which responsibly manage short- and long-term impacts on health, safety and the environment; and

WHEREAS, The Metropolitan Service District has investigated the environmental impact of St. Johns Landfill and has developed a Revised Closure and Financial Assurance Plan; and

WHEREAS, The Solid Waste Disposal Site Closure Permit for St. Johns Landfill issued by the Oregon Department of Environmental Quality (DEQ) requires that the Metropolitan Service District submit a Revised Closure and Financial Assurance Plan to DEQ; Now, Therefore, BE IT RESOLVED,

That the Council of the the Metropolitan Service District politan Service District approves the submission of the Revised Closure and Financial Assurance Plan for the St. Johns Landfill, September 1989, to DEQ.

ADOPTED by the Council of the Metropolitan Service District Service District this 26th day of October , 1989.

Mike Ragsdale, Presiding Officer

DON:jc SW89-1153.res 9/21/89 RESOLUTION NO. 89-1153, FOR THE PURPOSE OF APPROVING THE SUBMISSION OF A REVISED CLOSURE AND FINANCIAL ASSURANCE PLANFOR ST. JOHNS LANDFILL TO THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Date: October 18, 1989 Presented by: Councilor Gary Hansen

Committee Recommendation: The Solid Waste Committee voted 3 to 0 to recommend Council adoption of Resolution No. 89-1153. Voting: Councilors Hansen, DeJardin and Ragsdale. Absent: Buchanan and Wyers. This action taken October 17, 1989.

Committee Discussion/Issues: The Department of Environmental Quality (DEQ) issued a closure permit for the St. Johns Landfill in July 1988 that requires Metro to submit a revised closure and financial assurance plan. This revised plan responds to DEQ's request for additional information regarding the impact of the landfill on ground and surface water.

Metro's closure of St. Johns Landfill is intended to meet four objectives: 1) Close the Landfill properly; 2) Positively integrate the Landfill into surrounding wetland; 3) Provide opportunities to recycle waste; and 4) Provide an opportunity for research about closure methods and results.

Budget Impact: The financial assurance chapter of the plan estimates that, by 1995, \$26.7 million will be needed for total construction. Seven million dollars will be needed for operation and maintenance during a five-year closure and a 30-year post-closure. Ordinance No. 89-300, adopted in August 1989, dedicates \$31.4 million for financial assurance.

<u>Public Hearings</u>: The Solid Waste Committee held public hearings on Resolution No. 89-1153 on October 3 and October 17, 1989. The following individuals testified:

Mikey Jones, resident of North Portland, said that the estimated \$31 million is getting closer to what will be required to close the Landfill, but more will be necessary for improvements to Smith and Bybee Lakes.

Lee Poe, chair of the St. Johns Landfill Closure Committee, stated that it is important to protect and improve the water in the area and that there should be odor control.

George Ward, civil engineer, recommended the use of lime to reduce the costs of landfill closure, and the capture and selling of methane gas. SOLID WASTE COMMITTEE REPORT Resolution No. 89-1153 October 18, 1989 Page 2

Jim Sjulin, a representative of the Portland Public Parks Bureau, said the City would like to achieve a public park in the Landfill area, and that elements of the end use plan need to be monitored. He said "We need to work together to reclaim the area."

Major Questions/Issues: The final cover limits the amount of rainwater seeping into the garbage, provides a stable surface for stormwater runoff, and controls the release of landfill gas. The proposed plan calls for a 40-60 mil. geomembrane plastic cover. While other methods were considered, the plastic cover is currently recommended. The Committee questioned whether or not Metro was "locked into" the use of a plastic cover. The Solid Waste Director stated that Metro is not obligated to install a plastic cover. He said that at this time the DEQ prefers the use of a plastic cover but other methods that yield the same results would be acceptable.

The Committee wants the Solid Waste Department to remain open to other ideas and methods of landfill closure that may perform well and reduce costs.

The Committee stressed the importance of monitoring elements of the end use plan and working closely with others to successfully close the landfill.

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### STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 89-1153 FOR THE PURPOSE OF APPROVING THE SUBMISSION OF A REVISED CLOSURE AND FINANCIAL ASSURANCE PLAN FOR ST. JOHNS LANDFILL TO THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE: September 21, 1989 Presented by: Bob Martin
Dennis O'Neil

#### PROPOSED ACTION

Pass Resolution No. 89-1153 approving the formal submission of the REVISED CLOSURE AND FINANCIAL ASSURANCE PLAN for the St. Johns Landfill, September 1989 to the Oregon Department of Environmental Quality (DEQ).

## FACTUAL BACKGROUND AND ANALYSIS

This closure and financial assurance plan is a revision of a plan submitted by Metro in December 1986 with its application for a closure permit for St. Johns Landfill. DEQ requested more information about the impact of the landfill on ground and surface water. A DEQ closure permit, issued in July 1988, requires that Metro submit a revised closure and financial assurance plan.

This revised closure and financial assurance plan is based upon and references a hydrogeology and engineering report submitted by Sweet-Edwards/EMCON, Inc., in June and July 1989. The report, titled St. Johns Landfill Water Quality Impact Investigation and Environmental Management Options covers the impact at St. Johns Landfill and recommends ways to cost-effectively deal with this impact.

In July 1989 a Draft Closure and Financial Assurance Plan was sent to the Metro Council Solid Waste Committee and to 28 interested parties. Following a public comment period, during August, a final plan was issued in September.

Metro's closure of St. Johns Landfill is intended to meet four objectives:

- Close the landfill properly.
- 2. Positively integrate the landfill into the surrounding wetland.

STAFF REPORT
September 21, 1989
Page 2

- 3. Provide an opportunity for research about closure methods and results.
- Provide opportunities to recycle waste.

To close the landfill properly the plan proposes a drastic reduction in the generation of leachate (contaminated water). The slope of the cover over the waste would be increased to a minimum of 5% so the rain would be allowed to quickly run off the cover in a controlled manner rather than forming ponds on the cover. A multi-layered cover system including a plastic membrane would nearly eliminate leachate generation caused by rainwater percolation into the solid waste. This cover system alone is expected to consume 84% of the total construction cost. These improvements are expected to drastically reduce leachate generation and migration to the ground and surface water.

Also, landfill gas will be collected at one location. Initially this gas will be burned to minimize air pollution. If it is determined to be economically feasible, an energy recovery system may be incorporated.

The closure and financial assurance plan approaches the goal of integrating St. Johns Landfill into the surrounding wetland. It provides sedimentation ponds to ensure that the surrounding sloughs will be augmented by clean surface water runoff from the landfill. It also states that Metro is willing to explore financing options for maintaining Bybee Lake at a level which prevents contamination by leachate from St. Johns Landfill. Information concerning the methods and costs awaits a pending revision of the Smith and Bybee Lakes Management Plan.

The Closure and Financial Assurance Plan notes some areas of incompatibility with the City of Portland's 1987 End Use Plan for St. Johns Landfill. It points out that Metro could allow money remitted to the City for end use to be spent instead for similar adjacent offsite uses contributing to development of the wetlands for passive recreation. The exact nature of these uses awaits additional planning by the city.

The Closure and Financial Assurance Plan meets the goals of providing opportunities to recycle waste and allows for the potential use of the landfill for research. It includes yard debris compost as a component of the final cover system and sets forth criteria and a procedure for evaluating proposals for the use of other recycled waste and for landfill related research.

STAFF REPORT
September 21, 1989
Page 3

# BUDGET IMPACTS

The financial assurance chapter of the plan estimates that, by 1995, \$26.7 million (in current dollars) will be needed for total construction. Seven million dollars will be needed for operation and maintenance during a 5-year closure and 30-year post closure. The plan analyzes future cash flow based on these figures. As the project moves through final design to construction and operation more precise cost figures will become available for use in the annual budget process.

In August 1989 the Metro Council passed Ordinance 89-300, which dedicates a St. Johns Landfill Reserve Fund of \$31.4 million for financial assurance. Money has been collected for this fund since November 1988. This ordinance is the center piece of the financial assurance component of the plan.

### EXECUTIVE OFFICERS RECOMMENDATION

The Executive Officer recommends adoption of Resolution No. 89-1153.

DON:jc 9/21/89