



WS# 3

DATE: June 17, 2008
TO: Mayor and City Council
FROM: Director of Public Works
SUBJECT: West Winton Closed Landfill Update

RECOMMENDATION

That Council reads and comments on this report.

BACKGROUND

The City acquired a closed landfill from Oakland Scavenger Company (Waste Management of Alameda County "WMAC") in 1978. Since then, the City has been maintaining the landfill pursuant to an Order from the Water Quality Control Board, San Francisco Bay Region (RWQCB) and has spent financial and labor resources to maintain it. Over the years, numerous conditions developed that required additional focus from the City. Since 1995, the City and WMAC have been working cooperatively to maintain the landfill.

In July of 2007, as a result of the City excavating the soil in the close proximity of the landfill, the RWQCB became aware of possible existence of buried refuse in uncapped areas of the landfill. The agency required the City to perform a Human and Environmental Health Risk Assessment (HERHA) for delineation of the limits of refuse, uncapped materials, and impacts to groundwater along the northern portion of the landfill and up to a drainage slough. The City hired a consultant, Fugro West, to develop and implement a work plan to address the geological investigation and present findings to the RWQCB.

DISCUSSION

The Fugro investigation included findings that identified uncapped refuse and local areas of subsurface contamination along the northern portion of the landfill panhandle. A recent RWQCB letter and additional comments have indicated that placement of a clay cap over the previously uncapped areas around the perimeter of the 60 acre site will, likely, be a Board requirement. This and other yet unknown requirements could amount to hundreds of thousands of dollars in unbudgeted costs.

The City of Hayward purchased the landfill from Oakland Scavenger Company in 1978. The landfill is comprised of 60 acres on two separate main and “panhandle” landfill sections. The landfill is under a RWQCB closed site order, which outlines the City’s responsibilities for ongoing interior and exterior monitoring and maintenance. Around this time, the City and the East Bay Regional Parks District (EBRPD) agreed to maintain access to the public along the trails within the landfill and along the San Francisco Bay margins.

Since acquiring the property in 1978, the City has investigated and resolved numerous landfill conditions/problems. During the mid 1980’s, a red liquid was discovered to be leaking from the westward facing slope of the main portion of the landfill. The liquid or “leachate” was due to the excessive pressure of the soil and content subsidence. In addition, the original clay cap, placed on the landfill as a protective layer after the closure, had eroded and was allowing rainwater to penetrate into the landfill. The City evaluated the liquid and determined that it was leachate from inside the landfill. The City was obligated under the closed landfill permit to mitigate the condition. To stop the flow of leachate to the Bay, the City repaired the slope and installed a leachate removal pumping system. Since then, the leachate is pumped to the wastewater treatment plant for treatment. Additionally, the landfill was contoured for proper drainage on the top and slope surfaces to prevent rainwater from entering the landfill.

In late 1980’s, the RWQCB ordered the City to reinforce the existing clay cap on top of the panhandle and main landfill. A design and construction project occurred in 1988 that removed clayey soils from the adjacent City owned oxidation ponds and placed a new 2-foot layer on both landfill sections. In 1988, this project cost over \$400,000. Exhibit A provides four historic photos dating from when Oakland Scavenger Company first started operating the landfill until implementation of this 1988 project.

In the mid 1990’s, the RWQCB required that the clay cap be protected from erosion with the placement of a 2-foot vegetative cover. The City used treatment plant biosolids mixed with green waste to produce a compost material that was acceptable to the RWQCB and placed it on top of the clay cap over several years. In 1995, with the support of the RWQCB, the City and WMAC entered into a collaborative agreement to jointly maintain the landfill. WMAC agreed to maintain the leachate extraction system and monitor the contents of the landfill, while the City agreed to maintain the protective clay cap and vegetative cover. The funding for this maintenance work was budgeted in the Water Pollution Control Facility (WPCF) budget because the City was still using its biosolids from the WPCF for preparing the vegetative cover and was placing it on the landfill. In 2001, the 2-foot vegetative cover was completed and the entire landfill area was hydro-seeded.

Salem Communications Antenna Project

As part of the Russell City Energy Center (RCEC), the City had agreed to allow Salem Communications to relocate (four) 4 KFAX radio antenna towers to the top of the landfill to make room for RCEC on the parcel the radio station then occupied. That project never materialized as envisioned, and Salem decided to keep its KFAX antennas on the parcel.

In 2005, Salem Communications first approached the City regarding a lease for installation of 4 new radio towers for station KNTS on the landfill panhandle. Council will be considering approval of

this application on July 1, 2008. In 2007, to assess the suitability of the soil around the landfill to support landscaping for the antenna project, Salem hired MACTEC Engineering to place numerous borings around the landfill perimeter and to analyze the soil. The MACTEC activities were brought to the attention of the RWQCB, EBRPD, Hayward Area Shoreline Planning Agency (HASPA) and Alameda County Health Department. The MACTEC site analysis indicated that some landfill debris resided outside of the clay cap. During the ensuing investigations and site visits, some evidence of daylighted refuse was observed. At that time, the City contacted WMAC's West Winton Landfill contact manager and informed him of the situation. WMAC staff indicated they did not have much to contribute to the project and urged the City to complete its investigation as required by the RWQCB.

In July 2007, the RWQCB submitted a letter to the City requiring a work plan for investigation of the landfill for a possible HEHRA. In August 2007, Fugro West was hired to help the City comply with the RWQCB requirement. In January 2008, RWQCB accepted the work plan for evaluation of an area directly to the north of the panhandle. The evaluation revealed levels of contamination in two of the ten borings. The lead and zinc contamination was in excess of environmental screening levels (ESL's) as identified by the RWQCB. In late March 2008, Fugro began preparing the draft HEHRA report in order to meet the RWQCB deadline of April 15th.

WMAC Involvement and Cooperation

As it became evident this issue had the potential to be very complicated and costly to address, the City contacted WMAC in early April, updated its staff on the situation, and asked them to review Fugro's draft report. After reviewing the draft report, WMAC's closed landfill maintenance team agreed to work with the City in a collaborative manner to address the current situation and acknowledged it will need to participate in the costs to address this issue.. WMAC has since replaced Fugro with a consultant hired by WMAC (Geomatrix) for the current phases of the investigations. Geomatrix has worked with WMAC and RWQCT on other landfill closure issued. The report is due to the RWQCB on July 11, 2008.

The Work Ahead

City staff and WMAC will need to work cooperatively with RWQCB staff to satisfy the requirements of the Board for information and documentation. Based on the results of the investigations, the City will need to take the necessary actions to address any possible human and environmental health risks. These actions, individually or in any combination, could include placing a new clay cap over several acres of potential refuse areas, excavating the refuse and transporting it to an approved landfill, or expanding the leachate extraction system to the affected areas. At this point, Salem Communications' installation of new radio towers would not impact the landfill evaluation or potential remediation, except, possibly the timing of the remediation.

FISCAL IMPACT

To date, the City has spent \$60,000 on consultant services (Fugro West) for the most recent geotechnical and subsurface investigations. This cost has been covered from the Sewer Enterprise Fund.

WMAC is funding the next phase of the investigatory work using Geomatrix. Cost of the investigative work is estimated at \$20,000. However, at this time, it is not clear what the cost of the next steps will be. At the conclusion of this investigation, a report will be submitted to the RWQCB. After the Board review, a determination will be made as to the extent of the remedial work necessary to mitigate potential risks. A letter from the RWQCB would likely be issued August 1, 2008 providing a review of the report and indicating requirements for additional work.

The mitigation costs would depend on the selected mitigation. It has the potential to be several hundred thousand dollars or more. The City and WMAC will need to determine how this mitigation work will be funded. Staff will report back to the Council with an update after the extent of the work and the potential costs are better known.

PUBLIC CONTACT

Except for the staff from the affected agencies (i.e., RWQCB, EBRPD, HASPA, and County Health), no other public contacts have been made at this time.

NEXT STEPS

As mentioned above, here are the steps tentatively scheduled:

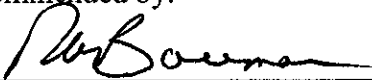
Submit to the RWQCB expanded report on the HEHRA	July 11, 2008
Regional Water Board Staff to Issue Directive Letter	August 1, 2008
City and WMAC to discuss Directive with RWQCB staff	August 15, 2008
City Council update	September 2008
Implementation Phase to Begin	September 2008
Implementation Plan to be Completed (estimated)	December 2008

Prepared by:



Alex Ameri, Deputy Director of Public Works

Recommended by:



Robert A. Bauman, Director of Public Works

Approved by:



Gregory T. Jones, City Manager

Attachment: Exhibit A - Historic Photos of West Winton Landfill (4)

**THE REFERENCED EXHIBIT(S) IS/ARE
ATTACHED AS A SEPARATE LINK**