



City of Austin

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December 21, 1998

Patricia M. Reeh
Edwards Aquifer Protection Program
Austin Region Office
Texas Natural Resource Conservation Commission
1921 Cedar Bend, Suite 150
Austin, TX 78758

RECEIVED

DEC 23 1998

TNRCC-Field Operations
Austin Region 11

Re: Application for Approval of Water Pollution Abatement Plan for City of Austin-Zilker Park; The intersection of Stratford Dr. and Lou Neff Road; Austin, Texas 78746.

Dear Ms. Reeh:

Watershed Protection Utility staff have reviewed the application and conducted a site visit on November 24, 1998 for the above-referenced project. The site is within the Recharge Zone of the Barton Springs segment of the Edwards Aquifer and is within the Colorado and Eanes (Dry) watersheds. This project is sponsored by the City of Austin Solid Waste Services Department (SWS), and we have discussed the project in detail with the staff and consulting engineers responsible for design of the project and the WPAP.

We understand from your discussion last week with Chuck Lesniak of our staff that the WPAP application has been withdrawn and an exemption letter was provided from TNRCC (December 4, 1998) excusing the project from the WPAP process. Despite our working closely with SWS staff to address concerns with the project within the City construction permitting process, we believe that the TNRCC should also review projects of this magnitude through the WPAP process. Because our department has reviewed the original WPAP and will monitor the project through design and construction we are assured that water quality protections will be implemented for the project. However, we will not have the opportunities for influencing private projects of this size and potential impact that we have when working with another City department. Therefore, in the future, we request that similar projects be reviewed through the full WPAP process.

Perhaps the project size and potential impact due to location was not evaluated adequately due to a discussion of phasing the project over several years. To clarify, the project plan calls for disturbance of 30 acres of soil during construction including placement of 58,000 yd³ of imported soil from another city excavation project. The fill will be used as a cover for a partially exposed municipal landfill in a widely used park setting within 50 feet of the shorelines of a drainageway (Dry Creek) and a major municipal drinking water source (Town Lake). For projects of this magnitude and location, we feel that TNRCC should thoroughly review the project design and geologic assessment, assess the site for recharge features, require the most stringent controls provided for in the Edwards rules, and schedule frequent site inspections during construction. The waiver of WPAP requirements for this project seems inappropriate as the nearby water resources clearly warrant the application of all the protections the WPAP process can provide.

In our review of the initial WPAP submittal, we identified several discrepancies that the consulting engineer preparing the WPAP (EMCON, Inc.) is now addressing. The following comments on the originally submitted WPAP are submitted for your consideration in similar projects of this nature and in your review of the site during construction should an inspection be scheduled. The majority of our concerns will be addressed as per discussions with the consultant (see italicized text below).

1. A general grading plan based on 1977 topography data was submitted; however, the applicant has not provided any standard details on the construction of the stabilized construction entrance, silt

fencing, rock berms, culverts, and permanent erosion controls. Please request that the applicant provide a detailed plan for review. *The consultant is currently scheduling an on-the-ground survey of the site for preparation of these plans including the requested details.*

2. The limits of construction should include the bank stabilization along Dry Creek. A general statement on the plans about removing exposed solid waste along the banks and installing erosion controls was included; however, the applicant has not selected or provided any details on the permanent erosion control structure(s) for the banks of Dry Creek. The applicant is directing some runoff towards Dry Creek; therefore, more detailed analysis and design in the area is warranted. *This information is also in preparation by the consultant. Although the original WPAP did not show the vertical extents of construction, EMCON has stated that only the first five to seven feet of the slopes toward Town Lane and Dry Creek will be disturbed. This should be evident on the final design drawings.*
3. Stormwater runoff from upgradient flows across the project site and along Stratford Drive. The runoff is conveyed onto the site as sheet flow or through culverts underneath Stratford Drive. Once on the project site, the stormwater follows two flow paths. One is along Stratford Drive towards Dry Creek and the other path is across the project site to Town Lake. As a result, additional temporary stormwater controls are needed in the western end of the project site along Stratford Drive and at construction entrances to prevent sediment-laden runoff from entering Dry Creek. In addition, silt fencing should be installed along the hike and bike trail to prevent sediment-laden runoff from discharging into Town Lake. *The consultant is evaluating minor sediment traps in the drainage patterns and terraces to collect sediment, which will be the last structures to be re-graded at the site. Detailed drawings of these features are being prepared.*
4. The applicant has not identified the location of the staging and temporary stockpile area and its erosion controls. *Each staging and stockpile area will be located within the limits of construction for individual phases of the project. Permanent erosion controls will be accomplished through plastic netting reinforcing and stabilizing a vegetated slope design.*
5. The applicant should be required to submit design drawings identifying how the culverts will be constructed. In addition, the culvert design should include erosion controls below the outfalls to Town Lake to prevent stormwater discharges from eroding the bank. *Erosion controls similar to the rock placements near existing culverts will be used and shown on detailed design drawings.*
6. If the applicant is planning to use the existing drainage culvert underneath the hike and bike trail, then some repairs and additional erosion controls will be needed below its outfall to Town Lake. *This outlet is under evaluation and will be remediated by further rock placement along the outfall slope.*
7. We understand that this landfill was never permitted by TNRCC and therefore is not subject to closure requirements of 30 Texas Administration Code (TAC) §330.251. However, it should be noted for future projects that improving the drainage by adding and grading of fill material may not be adequate to reduce infiltration. Especially, if the fill material has low clay content. Ideally, to reduce infiltration, a compacted layer of thick clay would be installed before unconsolidated fill material is added. *Since the TNRCC municipal solid waste staff have evaluated the project and excused the applicant from this requirement, and the availability of fill material from another City project is the primary factor making this project feasible at this time, we would concur that the current design will benefit the protection of water quality more than continued exposure and erosion of landfill material.*
8. The WPAP submitted appears to be incomplete due to the absence of a geologic assessment or documentation showing that TNRCC has granted a waiver. Also, no specific technical justification is provided in the WPAP for granting the waiver. Since this project is basically a closure or mitigation of an unregulated landfill, the information contained in a geologic assessment would be valuable in determining the ground water flow direction, the depth to bedrock, the soil thickness, and the soil type. *Previous studies of the site performed by Radian Corporation have provided some of this information and this has been forwarded to the EMCON design engineer.*

9. Several monitoring wells are shown on the site plan. Presumably, ground water level data are available to determine potential flow directions. Additionally, logs of the wells with waste thickness, type of waste, and depth to bedrock should be included. All these data should be included with the WPAP. *Previous studies of the site performed by Radian Corporation have provided some of this information and this has been forwarded to the EMCON design engineer.*
10. The applicant does not provide the project start and end date, which is necessary to evaluate erosion controls. *The schedule will be dictated somewhat by the availability of fill material from the City's excavation projects in other areas; however, SWS is providing a tentative schedule showing construction of the first phase starting by January 15, 1999 and additional phases as fill becomes available over the next five years.*
11. No mention is made of a de-watering methodology if contaminated surface and ground water is encountered during the installation of the culverts. The project notes should include statement that local, and federal laws require the water that comes in contact with the waste must be tested it determine proper disposal procedures. *No dewatering is projected to be necessary for the project as no significant subsurface excavation or structure placements are planned; however the EMCON engineer will evaluate during final design.*

Again, we are providing these comments for your use during construction site inspection of the project and for documentation supporting our recommendation that other projects of this size and potential impact should receive the full WPAP review.

Thank you for the opportunity to review and comment on these plans. Please feel free to contact Scott Hiers at 499-1916 or Chuck Lesniak at 499-2699 if you have any questions.

Sincerely,



Nancy L. McClintock, Division Manager
Environmental Resource Management Division
Watershed Protection Department

NLM/EDP/edp

xc: Central Files
Nancy L. McClintock, Division Manager, Environmental Resource Management
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