ILLINOIS POLLUTION CONTROL BOARD May 17, 2001

IN THE MATTER OF:)	
)	
PETITION OF THE CITY OF)	AS 01-2
GENEVA FOR AN ADJUSTED)	(Adjusted Standard - Land)
STANDARD FROM 35 ILL. ADM.)	
CODE 807.104)	

RICHARD M. SAINES, ROY M. HARSCH, AND SHEILA H. DEELY, OF GARDNER, CARTON & DOUGLAS, APPEARED ON BEHALF OF PETITIONER; and

MARK V. GURNIK AND PAUL R. JAGIELLO APPEARED ON BEHALF OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY.

OPINION AND ORDER OF THE BOARD (by R.C. Flemal):

This matter comes before the Board upon a "Petition for Adjusted Standard" (Pet.) filed on July 18, 2000, by the City of Geneva (Geneva). Geneva requests an adjusted standard from 35 Ill. Adm. Code 811.103-107, 109-112, 202-207, and Subparts E and F,¹ as they apply to excavated material that Geneva wants to use as it expands its publicly owned treatment works (POTW).

The Board's responsibility in this matter arises from the Environmental Protection Act (Act) (415 ILCS 5/1 *et seq.* (1998)). The Board is charged to "determine, define and implement the environmental control standards applicable in the State of Illinois" (415 ILCS 5/5(b) (1998)), and to "grant . . . an adjusted standard for persons who can justify such an adjustment" (415 ILCS 5/28/1(a) (1998)). More generally, the Board's responsibility in this matter is based on the checks and balances integral to Illinois environmental governance: the Board is charged with the rulemaking and principal adjudicatory functions, and the Illinois Environmental Protection Agency (Agency) is responsible for carrying out the principal administrative duties.

The Act also provides that "the Agency shall participate in [adjusted standard] proceedings." 415 ILCS 5/28.1(d)(3) (1998). On August 23, 2000, the Agency filed a response (Resp.) and recommended that the Board deny the adjusted standard.

Based upon the record before it and upon review of the factors involved in the consideration of adjusted standards, the Board finds that Geneva has not demonstrated that

¹ Part 811 of the Board's regulations address standards for new solid waste landfills. Subparts E and F address construction quality assurance and financial assurance.

grant of an adjusted standard in the instant matter is warranted. The Board will accordingly deny the adjusted standard.

PROCEDURAL HISTORY

A hearing was held in this matter on October 11, 2000, in Geneva, Illinois, at the Geneva City Hall, City Council Chambers, before Hearing Officer Bradley Halloran. The Agency confirmed at the hearing that they opposed granting the variance. Tr. at 27. Witnesses for Geneva were John Donahue, superintendent of water and sewer for the City of Geneva; Thomas Talsma, director of public works for the City of Geneva; and James Huff, registered professional engineer with Huff and Huff, Incorporated. The Agency did not present any witnesses.

Geneva filed its posthearing brief (Geneva Br.) on November 16, 2000. The Agency filed its response to Geneva's brief (Resp. Br.) on December 14, 2000. Geneva filed its reply to the Agency's brief (Reply Br.) on December 22, 2000.

On February 1, 2001, the Board issued an order requesting that the parties address the significance of a police gunnery range at the site, and requesting that Geneva submit water quality analyses. On February 15, 2001, Geneva filed the requested material. The Agency failed to respond to the Board's order.

NATURE OF THE SITE

Geneva is currently expanding its publicly owned treatment works (POTW). Pet. at 1. The POTW is located within the City of Geneva at a site along the Fox River south of the Union Pacific railroad tracks and west of Route 25. Exh. 3. Geneva is completing the expansion in two phases. Pet. at 1. Phase I involved building two anaerobic digesters and a digester control building. Pet. at 1. A new interceptor sewer was also constructed into the POTW. Pet. at 1. Phase II involves building additional primary clarification, aeration, and final clarification tanks and equipment, sludge dewatering equipment, and a dewatered sludge storage pad. Pet. at 1.

During the project planning process, Geneva prepared excavations at the POTW to document bedrock elevations in the treatment plant expansion area. Tr. at 30. The excavation removed material that contained glass and cinder-type material. Tr. at 30. Talsma testified that he was not informed of any formal landfilling operations in that area. Tr. at 38. However, it is in an area that has seen extensive filling over the years, including the Highway 25 bridge construction and new POTW access road. Pet. at 3.

Phase I is nearly complete. Pet. at 2. The two digesters and digester control building were built at the eastern edge of the site. Pet. at 2. During Phase I, Geneva excavated 7,500 cubic yards of soil, of which they claim 5,000 cubic yards is excess excavated soil which may

_

² Citations to the hearing transcript will be cited as "Tr. at ___."

be used as fill and berming material on-site.³ Pet. at 2. Geneva expects to begin Phase II in the winter of 2001. Pet. at 2.⁴ Phase II will involve the excavation of an additional 15,000 cubic yards of excess soils that can be used as fill and berming material on site. Pet. at 2. The total cost of the POTW expansion project is approximately \$21 million. Tr. at 46.

3

At issue is the excavated soil that the expansion project is producing. Pet. at 3. Geneva requests that the Board grant an adjusted standard and determine that the soil is not waste that is subject 35 Ill. Adm. Code Subtitle G's substantive landfill or off-site disposal requirements. Geneva intends to use the soil for berming and to fill a tertiary lagoon at the site. Geneva Br. at 2. Geneva wants to fill the lagoon because it periodically experiences algae growth and the lagoon is the only location on which to place the sludge dewatering equipment and build a sludge storage pad. Geneva Br. at 2.

Geneva notes that the soil appears to be fill material that is a mixture of soil and discarded material from an historic landfill. Pet. at 5. The landfill existed south of the railroad track and east of the POTW. Pet. at 2. The non-soil portion of the fill material is primarily broken glass, bricks, and charred cinders. Pet. at 2. If the Board does not grant the adjusted standard, Geneva argues it will cost \$850,000 to remove the material and bring additional fill back to the site. Tr. at 46-47.

STATUTORY AND REGULATORY FRAMEWORK

In determining whether to grant an adjusted standard, Section 28.1 of the Act (415 ILCS 5/28.1 (1998)) requires the Board to determine whether a petitioner has presented adequate proof that: factors relating to the petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulations applicable to that petition; the existence of these factors justifies an adjusted standard; the requested standard will not result in environmental or health effects substantially more adverse than the effects considered by the Board in adopting the rule of general applicability; and the adjusted standard is consistent with federal law. 415 ILCS 5/28.1(c) (1998). In granting an adjusted standard, the Board may impose such conditions as may be necessary to accomplish the purposes of the Act. 415 ILCS 5/28.1(a) (1998).

Geneva requests an adjusted standard that would allow it to use the soil material excavated from Phases I and II as fill for the construction activity. Geneva Br. at 1; Tr. at 67-68. To use the material, it requests an adjusted standard from the Board's general standards for all landfills found at Section 811.103-07, 811.110-12, and 811.202-7; and from Subpart E, Construction Quality Assurance; and Subpart F, Financial Assurance. Pet. at 4. Geneva proposes that the adjusted standard language read:

³ This material was placed near the Phase I excavation on the area where Phase II will be constructed. Geneva Br. at 2.

⁴ Permit applications are currently pending at the Agency. Geneva Br. at 2.

The excess excavated soil consisting of fill material from the City of Geneva's POTW site located at 602 Crissey Avenue, Geneva, Illinois, 60134, generated as part of Geneva's ongoing expansion, and which is used for berming and filling of the tertiary lagoon is not subject to the requirements of Subtitle G of the Illinois Administrative Code." Pet. at 6.

DISCUSSION

Substantially Different Factors

Geneva believes that the factors relating to it are substantially and significantly different from those factors relied upon by the Board in adopting Subtitle G. Pet. at 8. It argues that the regulations governing solid waste landfills are not drafted to address excavation that uncovers non-hazardous historical material from former dumping. Reply Br. at 3. Geneva contends that the Board was not concerned with the activity that Geneva proposed to undertake when the Board adopted the landfill regulations. Reply Br. at 3-4. It alleges that because there is no hazardous condition at the site, the Agency is stretching it to fit the landfill regulations to the situation. Reply Br. at 4.

The Agency disagrees that the factors relating to the site are substantially and significantly different from the factors relied upon by the Board when it adopted Subtitle G or Part 811. Resp. Br. at 3. The Agency argues that there is nothing unique about the case's circumstances as they relate to Geneva. Resp. Br. at 3. They further assert that Geneva is not different from other individuals in the regulated community that have encountered buried waste during construction activities. Resp. Br. at 4.

Justification

Geneva believes an adjusted standard is necessary because Geneva would beneficially use the excavated soils; the soils pose no significant environmental risk; the soils are suitable construction material; and compliance with the Subtitle G requirements would be unreasonably and prohibitively expensive. Pet. at 4. Geneva notes that the soils would only be moved about 100 feet from their former location. Geneva Br. at 6. They would be used for berming and to fill the existing tertiary lagoon. Geneva Br. at 2.

Geneva argues that the Huff and Huff report shows that the soils pose no environmental risk. Pet. at 5; Exh. 2. The environmental risk is discussed on the following page.

Geneva also alleges that it would cost \$174,000 to properly dispose of the Phase I soils currently stored on the site. Pet. at 6. Also, disposing of the Phase II soils would cost \$500,000. Pet. at 6. It would cost an additional \$185,000 to have clean fill brought in to fill the tertiary lagoon and to berm around the newly constructed tanks and buildings. Pet. at 6. Geneva states that it "is currently spending \$15 million to enlarge and modernize its POTW to meet changing regulations. Geneva is also spending \$16 million to upgrade its public water

supply system" Pet. at 8. Geneva points out that it "is also faced with many other capital projects." Pet. at 8. As justification for approving the adjusted standard, Geneva argues that it "should not be required to spend approximately \$1 million to landfill the excavated soils and bring in new fill material." Pet. at 8. For these reasons, Geneva believes an adjusted standard is justified.

5

Geneva also offers that disposing of the soils off-site would take up valuable landfill space and negatively impact air quality by the trucks hauling the relocated soil. Pet. Br. at 11.

The Agency argues that Geneva has not justified why the Board should grant the adjusted standard. Resp. Br. at 4. They argue that an economic hardship is an insufficient basis on which to grant an adjusted standard. Resp. Br. at 4. Additionally, granting the adjusted standard due to economic hardship would entitle all other persons excavating waste to such relief. Resp. Br. at 4.

Environmental Effect

Geneva asserts that there is no significant environmental risk in using the excavated soils as construction fill in the POTW project. Pet. at 2. They note that the soil tests did not show hazardous waste characteristics. Pet. at 2, citing Exh. B. at 7. Additionally, Geneva argues that no environmental concerns would justify removing the excess excavated soil off site to be treated as waste and importing fill for the expansion project. Geneva Br. at 5.

Geneva further argues that after evaluating fifteen soil samples, Huff and Huff concluded that the soil from both Phase I and Phase II would be suitable for use as fill. Geneva Br. at 9, citing Tr. at 86. Geneva acknowledged that one sample from Phase II area exceed TCLP standards for lead, but noted that Huff testified that there was a strong possibility that this was an outlier. Geneva Br. at 9.

Geneva also notes that Huff and Huff installed a bedrock monitoring well on site and downgradient from the Phase II location. Geneva Br. at 9. The results were either non-detectable, or for certain metals and volatile organic compounds, met the Class I groundwater standards. Geneva Br. at 9, citing Tr. at 94 and 103.

The Agency contends that Geneva has failed to show that the requested standard will not result in environmental or health risks. Resp. Br. at 4. First, the Agency challenges the groundwater data from the monitoring well. Resp. Br. at 5. The Agency argues that Geneva did not give them the data before the hearing, which gave them minimal opportunity to review the data's technical merits. Resp. Br. at 5. The Agency further notes that although the well was installed near the Fox River, Geneva failed to provide information about the potential impacts the river would have on the well. Resp. Br. at 5. Geneva assumed that the

_

⁵ Exhibit B is a report from the environmental consulting firm of Huff and Huff.

groundwater was flowing toward the river, but the Agency argues the river water may have been flowing toward the well. Resp. Br. at 5. The Agency questions the weight that the Board should give the well evidence, since it says nothing about the relationship between the groundwater at the monitoring well and the wastes in the area of the excavation. Resp. Br. at 5.

The Agency also has reservations about lead contamination at the site. Resp. Br. at 6. The Agency argues that the soil sample that revealed the TCLP exceedence justifies that the soils should be considered hazardous waste. Resp. Br. at 6.

Consistency with Federal Law

Geneva argues that the requested adjusted standard is consistent with federal law. Geneva Br. at 12. Geneva contends that the Phase I excess soils are not hazardous; and if Phase II soils are determined to be hazardous waste, Geneva will treat them as hazardous waste. Geneva Br. at 12.

The Agency argues that placing the waste that tested positive for lead as fill material would be inconsistent with Subtitle C of the Resource Conservation and Recovery Act (RCRA). Resp. at 8. The Agency also pondered whether reburying the waste on site would be inconsistent with federal law or federal procedural requirements under Subtitle D of RCRA. Resp. at 8.

ANALYSIS

Based on its review of the record in this matter, the Board finds that grant of the requested adjusted standard is not warranted. This conclusion is based on the statutory factors, set forth at Section 28.1 of the Act, involved in the Board's consideration of adjusted standards as they apply to this case.

First, the Board finds that the relief Geneva has requested is vague. As the Agency properly notes, the case caption on the petition indicates Geneva is seeking an adjusted standard only from 35 Ill. Adm. Code 807.104. Resp. at 2. However, later in the petition, Geneva states it seeks relief from Part 811, Subparts A, B, E, and F. Resp. at 2. Additionally, both the petition and the post hearing brief relief generally from Subtitle G. Pet. at 3 and 6; Geneva Br. at 1 and 5. The Board cannot determine whether a petitioner has demonstrated an adjusted standard is necessary if the regulations from which the petitioner seeks relief are not sufficiently set forth.

Substantially Different Factors

Regardless of the deficiencies in describing the relief it seeks, the Board finds that Geneva has not shown that the factors relating to the site are substantially and significantly different from those factors relied upon by the Board in adopting 35 Ill. Adm. Code Subtitle G.

The Board's waste disposal regulations were adopted in R88-7. See, <u>In re</u>: <u>Development</u>, <u>Operating and Reporting Requirements for Non-hazardous Waste Landfills</u> (September 18, 1990), R88-7. These regulations contain development, operating and reporting requirements applicable to new and existing landfills that dispose of non-hazardous waste.

The Board is not convinced that Subtitle G should not cover situations like Geneva's. Geneva seeks to move contaminated waste and place it nearby. Geneva is seeking permission to dump contaminated waste, but has failed to demonstrate that the factors relating to the site are different from the factors consider by the Board when it adopted Subtitle G.

Justification

To justify the adjusted standard, Geneva alleges that moving the waste off-site is prohibitively expensive. Pet. Br. at 11. Geneva also has other municipal projects that would be impeded by applying the landfill regulations to this project. Pet. Br. at 11. The Board notes that Geneva fails to present any analysis of the impact that the denial of the adjusted standard would have on the capital improvements it is currently undertaking. Such an impact analysis would help to place the additional expenditures in relative terms. In addition, moving the waste off-site is only one alternative for addressing the waste.

Without an analysis of the cost impact or other viable alternatives for handling the waste, the Board finds the adjusted standard is not justified.

Environmental Effect

The Board is not convinced that moving the waste, even 100 feet away, would not cause environmental harm. Section 28.1(c) of the Act requires the petitioner to present adequate proof that the adjusted standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability.

The Board notes that Geneva presented soil and water sampling and analytical data to support its claim that the material does not pose significant risk to the environment. Data was provided for 16 soil locations and four groundwater locations. Exh. 2 and 7. A review of the sampling and testing data raises a number of concerns regarding the waste characteristics.

First, Geneva did not use representative samples to characterize the material from the historic fill area. Geneva's consultants analyzed 15 of the 16 soil samples for metals utilizing the TCLP (Toxicity Characteristic Leaching Procedure) to determine whether the material would be characteristic hazardous waste. Thirteen of the 16 samples were taken in the Phase I area and three were taken in the Phase II area all before excavation began. Geneva identified that one soil sample taken in the Phase II area exhibited a lead level that exceeded the hazardous waste characteristic level. Although Geneva argues this sample is not consistent with the other 15 samples, the Board notes that 13 of those 15 samples were taken over 100

feet away in the Phase I area and in very close proximity to each other. Statistically speaking, the high lead sample does not belong to the same population of samples taken in the Phase I area and cannot be correctly identified as an outlier without further site characterization.

The Board notes that several maps in Exhibit 3 refer to an on-site "policy gunnery range" located at the approximate location of the fill pile. In an order issued on February 1, 2001, the Board directed Geneva and the Agency to inform the Board of any possible relationship between the existence of this range and the merits of the petition. Geneva responded on February 15, 2001, with a Submission of Additional Requested Materials, noting that "the only place where spent bullets would remain . . . has not been disturbed by the construction activities . . . and remains completely intact." Additional Materials at 1. The Agency has not responded to the February 1, 2001 order.

Additionally, the Board notes that the Agency has expressed similar concerns regarding Geneva's soil sampling. Actually, the Agency states that contaminated soils should be managed as hazardous waste since there is no indication that the sample results with high lead value are false or incorrect. Agency Br. at 6. The Board shares these concerns.

Geneva analyzed 15 out of the 16 soil samples using TCLP to characterize the fill material as not hazardous waste. Only one soil sample (MW-1) was actually analyzed for metals content per SW-846 methods. Geneva has committed to completing an additional sampling plan for Phase II as well as segregating any material it finds in the excavation that would not be appropriate for use as fill. Geneva Br. at 10. Because of the differences in procedures, simply demonstrating that the fill material would not be considered a hazardous waste does not demonstrate there would be a manageable risk or no unacceptable risk. Although Geneva contends that with the exception of one soil sample with high lead value all other sample results meet Tier 1 TACO soil objectives, as noted above, the samples are not adequate to make a Tier 1 TACO demonstration. In light of this, the soil sampling data provided by Geneva is not adequate to demonstrate that the remaining material from the historic fill may be used as construction fill material without the application of the Subtitle G requirements.

The Board is also concerned that the groundwater sampling results from MW-1, 2, and 3 show exceedence of Class I and/or II Groundwater Standards for: lead, arsenic, nitrate, cadmium, manganese, nickel, chloride, boron, antimony, trichloroethylene, copper, and zinc. For many other constituents, the analytical reporting level was above the Class I and II Groundwater standards, making it impossible to discern whether other standards may have been exceeded.

At hearing, Geneva's consultant characterized the water from MW-1, 2, and 3 located in the fill as "perched water" or "leachate water" as opposed to groundwater, which would be found at the bedrock level such as in the bedrock monitoring well. Tr. at 117. However, the water analyses from MW-1, 2, and 3 might be more representative of water that would pass through the fill than the water found in the bedrock.

The Board notes Geneva states that "[t]he soils that will be excavated as part of this necessary expansion have been used on-site as fill for approximately 70 years and have not posed a significant environmental risk." Pet. at 6. Geneva concluded "there should be no additional risk from this activity." Pet. at 7. However, the Agency expressed concern that the level of risk posed by the fill might change by moving it to create berms and fill the lagoon. The Agency states that physically changing the porosity and surface area through excavation and filling may increase the risk for contaminants leaching into the groundwater due to increased exposure to precipitation and infiltration. Agency Resp. at 6.

The Board believes that additional information relating to waste characteristics and site hydrogeologic conditions would be needed to evaluate the impact of the relocated waste on groundwater. As noted previously, the record lacks such information.

Moreover, although Geneva addressed the characteristics of contaminant migration, Geneva did not address changes in migration pathways that could occur as a result of its proposed activity.

Additionally, Geneva identified the nearest potable well at 1000 feet east of the POTW measuring 1800 feet deep, and offered to place a deed restriction on the property to preclude groundwater use. Tr. at 71; Pet. at 7. Although potable groundwater would probably not be a concern, the contaminants could enter the Fox River through new and altered migration pathways. The Fox River is used as a source of drinking water.

Based on this, there may be a quantifiable difference between the impact of Geneva's proposed activity with and without the adjusted standard, contrary to Geneva's statement, "there should be no additional risk from this activity." Pet. at 7.

Given all of these conditions, the Board finds that Geneva has failed to demonstrate that granting the adjusted standard will not result in any significant environmental risk.

Consistency with Federal Law

Lastly, the Board agrees with the Agency that Geneva has failed to show that granting an adjusted standard would be consistent with federal law. Geneva's post-hearing brief and reply brief ignore the Agency assertions in its response that an adjusted standard would violate Subtitle C of RCRA.

CONCLUSION

For the reasons detailed above, the Board denies Geneva's adjusted standard petition.

This opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

The City of Geneva is hereby denied an adjusted standard from 35 Ill. Adm. Code Subtitle G, as requested in its petition filed with this Board on July 18, 2000.

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1998)) provides for the appeal of final Board orders to the Illinois Appellate Court within 35 days of the date of service of this order. Illinois Supreme Court Rule 335 establishes such filing requirements. See 172 Ill. 2d R. 335; see also 35 Ill. Adm. Code 101.520, Motions for Reconsideration.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 17th day of May 2001 by a vote of 7-0.

Dorothy M. Gunn, Clerk Illinois Pollution Control Board

Dorothy In Gun