ILLINOIS POLLUTION CONTROL BOARD
July 20, 1995

JACK PEASE, d/b/a GLACIER LAKE EXTRACTION, Petitioner,	)	
v.	)	PCB 95-118 (Permit Appeal-Mining)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Respondent.	)	

MARY BRYANT OF BROWN AND BRYANT APPEARED ON BEHALF OF THE PETITIONER, AND

CHUCK GUNNARSON APPEARED ON BEHALF OF THE RESPONDENT.

OPINION AND ORDER OF THE BOARD (by C.A. Manning):

This matter is before the Board on a petition for review of a final determination of the Illinois Environmental Protection Agency's (Agency) denying a permit to petitioner, Jack Pease d/b/a Glacier Lake Extraction (GLE), brought pursuant to Section 40(a) of the Illinois Environmental Protection Act (Act). (415 ILCS 5/40(a).) The petition for review was filed with the Board on March 31, 1995, and seeks reversal of the Agency's February 24, 1995 decision denying GLE a non-NPDES mine-related pollution control permit for its sand and gravel mine located in Richmond, McHenry County, Illinois (GLE site). The Agency denied the permit on the basis that the information was insufficient regarding contamination of groundwater at the site and the effects that the operation of the mine have on the migration of contaminants. (R. at 109.[1])

A public hearing was held before the Board's Chief Hearing Officer, Michael Wallace, on May 31, 1995 at the McHenry County Government Center in Woodstock, Illinois. Members of the public were present, but only one offered public comment.[2] The following persons testified on behalf of GLE: Jack Pease, the owner of GLE,

---

[1]In this opinion the citations that will be used are: For citations to the record on appeal, "R. at "; for citations to the IPCB hearing transcript, "Tr. at "; for citations to the petitioner's post-hearing brief, "Pet. Br. at "; for citations to the respondent's post-hearing brief, "Agency Br. at "; for citations to a deposition of Bruce Yurdin admitted at hearing, "Yurdin Tr. at "; and for citations to exhibits admitted at hearing, "Pet. Exh. # ".

[2]Section 32 of the Act allows members of the public to offer comment at Board hearings. Pursuant to Board procedure, the hearing officer in this case asked if anyone from the public wanted to make any statements. Minard E. Hulse, an attorney, offered public comment on behalf of Jeanne F. Pettry.

Thomas Hartz, an employee of Pease Construction and the permit manager for GLE, and Michael Tryon, laboratory director and president of McHenry Analytical Laboratory. GLE also called as adverse witnesses, Robb Layman, legal counsel for the Agency, and Bruce Yurdin, the permit reviewer of the Glacier Lake permit application. Bruce Yurdin also offered testimony on behalf of the Agency. At hearing, the hearing officer admitted several exhibits offered by petitioner including the deposition testimony of Bruce Yurdin, and several site maps.[3] (See Pet. Exh.s #1-10.) On June 19, 1995 both GLE and the Agency filed their post-hearing briefs, and on June 21, 1995, the Board received a post-hearing written comment from Minard E. Hulse.

For reasons more fully explained below, we hereby reverse the Agency's final determination issued February 24, 1995, and remand the matter to the Agency for final action consistent with this opinion and order.

FINDINGS OF FACT

Location and Operation of the Mine

Glacier Lake sand and gravel mine is located at 7317 Keystone Road, Richmond, McHenry County, Illinois. It was purchased in 1989 by Jack Pease and James Tonyan as a partnership, and in May, 1994, Jack Pease acquired all of James Tonyan's interest in the property. (Yurdin Dep. Exh. #5.) The Glacier Lake site has been commercially mined for sand and gravel since at least August, 1990 by GLE, and prior to GLE's ownership, since approximately 1945. (R. at 98.) GLE has had a permit from the Agency for virtually the same operation it seeks in this permit since 1990.[4] (R. at 20-21; Tr. at 31,64.)

The entire site is approximately 70 acres with eight to ten acres presently reclaimed and reseeded. (R. at 16.) 30 acres

---

[3]The hearing officer did not admit the deposition transcript of Thomas McSwiggen, an employee of the Agency, which was offered as evidence by the petitioner during the hearing. In the petitioner's post-hearing brief, GLE requests that the Board admit two "statements against interest" made by McSwiggen which appear in the deposition transcript. In response, on June 23, 1995, the Agency objected to the motion to admit on the basis that it is inappropriate to use discovery as evidence in the form of a "statement against interest" especially when the deposed party was not called to testify. We agree and deny the motion to admit. The hearing officer's ruling has not been challenged, and we will not allow portions of that transcript to be used as "evidence" when the party deposed could have been but was not called to testify.

[4]In August 1990 the Agency issued a non-NPDES surface mining operating permit to James Tonyan d/b/a Glacier Lake Extraction, of which Jack Pease was a partner. (R. at 20.) This permit is being requested by Jack Pease d/b/a Glacier Lake Extraction.

are currently open and being mined. (Pet. at 1.) 25 acres of the site remain for further mining. At the current rate of mining, the Glacier Lake site will be mined out by the year 2001. However mining in the current portion of the site should be completed in two to three years. (Tr. to 20; R. at 98.) When mining at the site is completed, the owner expects to convert the property into a low-density housing development of approximately twenty home sites around two man-made lakes. (Tr. at 27-28; R. at 12.)

Sand and gravel are mined at the site by using an earthmoving piece of equipment known as a "scraper" to shave-off surface soil or "overburden." (Tr. at 50-51.) After the overburden is removed and placed elsewhere on the site, front-end loaders and backhoes are used to dig up the mined material which is the sand and gravel. The sand and gravel is washed with plain water and sorted according to size and stored pending shipment out of the site. No chemicals or explosives are used in the processing of the sand and gravel. Sorted material is then loaded into large dump trucks by the front-end loaders for shipment off-site. (Tr. at 49.) All of the operating machinery at the mine is powered by diesel fuel oil and each piece of equipment uses approximately 80 gallons of fuel per day. (Tr. at 41-42.) At hearing, Thomas Hartz, a project manager for Pease Construction, who manages GLE's permits, testified that GLE stores no fuel on the site and GLE conducts fueling of the GLE vehicles away from the open pit on an area that is either concrete or clay with greater than 100% compaction. GLE also has a contingency plan, which includes training sessions, for dealing with spills should they occur. (Tr. at 40-56.)

1994 Operating Permit Application

In August 1994, four months after Pease acquired Tonyan's partnership interest, the Agency notified Pease that he should apply for a new permit as a 1990 operating permit was not transferable to Jack Pease because it was issued solely in the name of James Tonyan.[5] (Tr. at 31-32.) On behalf of GLE, Jack Pease submitted the permit application at issue seeking an operating permit on November 28, 1994 pursuant to 35 Ill. Adm.

---

[5]The Agency takes the position that the petitioner no longer has a valid operating permit and it has instituted various legal actions (most of which are still pending and none of which are before this Board) in an effort to cause Pease to cease and desist his operations at the mine solely because of the permit/ownership issue. Additionally, McHenry County has also instituted legal action against Jack Pease regarding this issue. There appear to be no other allegations of violation of the Act at issue regarding this site other than for Pease's continued operations of the site in light of the ownership question. (Tr. at 33-35.)

Code, Subtitle D, "Mine Related Water Pollution" Part 404, "State Permits". (R. at 9-38.) The application described the project covered by the application as the open sand and gravel pit and indicated that the application was for "abandoning". The application also attached three permitting schedules, one for the construction and opening or reopening a mine, operating the mine, and the abandonment of a mine. (R. at 14-16.) Though any permit the Agency would issue would not cover or otherwise authorize GLE's future plans for construction on the site, the application attached reclamation plans which describe GLE's plans to convert the site to a low-density housing development. (R. at 18.)

While none of the questions on the application specifically request information regarding groundwater monitoring at the GLE site, the Agency's permit application form requested certain information regarding water pollution at the site, as well as information regarding groundwater, waterwells and impact on local public water supplies. The application requested that the applicant "discuss proposed means of avoiding air, land and water pollution at this site when opening the mine." (R. at 14.) In response, GLE stated: "Any water within the mine area will remain contained. Waters will be tested quarterly both upstream and downstream from the pit."

The application also requested that GLE provide certain information regarding groundwater. GLE was asked to provide a list underground water resources, public water supplies, a map showing all private water supplies within a one-mile radius, location of wells within the set-back zone and supporting hydrogeolic data. The application further requested that the applicant discuss any affects the mine will have on water supplies. (R. at 15, Questions ##6-9.)

In response, GLE provided information regarding the public water supplies, a groundwater monitoring well map showing three groundwater wells (R. at 39), groundwater sampling data for rounds of sampling in April of 1993 and June of 1994 (R. at 27-31), and well construction logs for three of the four groundwater monitoring wells located on the GLE property and for a wash plant well. (R. at 40-43.) GLE also provided two reports, one of which is entitled *Groundwater Monitoring Surveillance for Tonyan Brothers, Inc.*, and was compiled by McHenry Analytical Laboratory to explain the April 1993 sampling data, and the second report is a water resource inspection report by McHenry County for the GLE site. (R. at 37-38.)

The groundwater data reports submitted to the Agency show readings of Purgeable Organic Carbon (POC) at the GLE site. Regarding the April 1993 data, the POC reading for one well tested is 2.887 mg/L (or 2887 ug/L). (R. at 36.) On the issue of POC, the McHenry Analytical Laboratory report, which accompanied these results, stated that:

> Purgable Organic Compounds (sic.)(POC) are a total sum of Volatile Organic Compounds (VOC). These compounds are found in fuels such as gasoline or diesel fuel. POCs should be used as an indicator of potential problems. Should POCs be found, it is recommended that a volatile organic compound screen be performed. (R. at 35.)

At hearing, Michael Tryon, the laboratory director and president of McHenry Analytical Laboratory, who prepared the report for GLE, testified that this paragraph was only intended to give gravel pit owners and operators an idea of what it was their groundwater was being tested for, and was not intended to be the sole basis upon which the Agency should determine the meaning of a facility's groundwater analysis. (Tr. at 197.) (For additional discussion on the nature of POC, *see infra*, at pages 9-12.)

Regarding the June 28th round of sampling, the POC results were:

GL#1 - 521 ug/L
GL#2 - "unable to collect sample due to dry well"[6]
GL#3 - 388 ug/L
GL#4 - 1607 ug/L. (R. at 27-31.)

The Agency's December 27th Request for Additional Information

One month later, on December 27, 1994, the Agency issued a letter requesting additional information from GLE. (R. at 69-70; Exh.#7.) The Agency asked for several categories of information; however, the request for additional information pertinent to this appeal is found at paragraph #5 of the Agency's December 27th letter. That paragraph stated:

> The attachments to the application refer to four (4) monitoring wells installed after 1991. The plans for the site must identify the location of all wells, monitoring and potable, on the property. The results of the monitoring included in the application indicate concentrations of purgable organic carbon (POC) at three well from a June 28, 1994 round of sampling. Please provide data on the construction of the wells, screened and finished depth, and the possible source(s) of the POCs detected in the samples. If additional analyses were conducted on these samples to identify specific volatile organic compounds, please provide the results.

---

[6]This well is consistently dry; therefore even though GLE submitted sampling data for four groundwater monitoring wells, only three of the wells actually have sampling results. (See e.g. R. at 27-31.)

The letter further provided that the Agency has received several requests to hold public hearing on this application, but that no decision had been made regarding the hearing. The letter finally stated that if the responses were adequate, the Agency would complete its review. (R. at 70; Exh. #7.)

GLE's Response to the Agency

In response to the December 27th letter, Hartz (Tr. at 63) and Mary Bryant, GLE's counsel, each sent Bruce Yurdin letters dated January 11, 1995. Hartz's letter enclosed: (1) for a second time, well construction logs for the three groundwater wells and the wash plant well (*see* R. at 40-43 and R. at 77-80); (2) a second copy of the same map which was previously submitted showing three groundwater monitoring wells and the wash plant well (see R. at 39 and R. at 76.); (3) a copy of the McHenry County Manual for Groundwater Monitoring and Protection at Earth Materials Extraction Sites adopted by the McHenry County Board (R. at 81-87); and (4) a copy of the McHenry Analytical Water Laboratory sampling procedures, which was also in the Agency's possession as part of the groundwater sampling data. (See R. at 1, 27, 33 and 75.) Regarding the possible sources of POC, the letter stated at paragraph #5:

> The well logs are enclosed. There are only three wells actually on the pit property.[7] The POCs indicated on the test results are found both upstream and downstream [upgradient and downgradient] from the pit with the upstream well producing the higher amounts of POCs. These results suggest that POCs originate off site from the upstream property. The POCs may potentially emanate from any fuels or farm chemicals used on the adjacent property. The McHenry County Health Department evaluate our samples every quarter. They are satisfied to date. (R. at 97-101.)

---

[7]The Agency requested that GLE provide additional information on the location of four groundwater monitoring wells on the pit property and the installation logs for these wells. GLE only provided supplemental information for well nos. 1, 2, and 3, and offered no additional information for well #4. In addition to being a groundwater monitoring well, well #4 is also a drinking water well located within 75 feet of a rental house on the GLE property, and the record shows that at this well, the POC readings are the highest levels. At hearing, on behalf of GLE, Hartz explained that the installation log was not provided for this well because none exists, and that he did not show it on the site map due to an oversight. He testified that he was not attempting to hide any information regarding well #4 and that the Agency did have knowledge of the location of this well. Yurdin also testified that the Agency had a site plan with well GL#4 identified on the map in its file (this map was admitted as Exhibit #10 at hearing). The record also shows that the Agency had the groundwater sampling data for this well showing the POC reading of 1607 ug/1. (See petitioner's Exhibit #10, which is a site map showing all four wells; Tr. at 220-21.)

Bryant's letter also addressed POC and its possible sources. Her letter provided:

> Monitoring of the near-surface groundwater over the past two years has revealed no significant water quality concerns, as Illinois EPA must know from its review of data submitted by Glacier Lake as well as by Glacier Lake's opponents. The only elevated constituent, POC, is still very low, and it is consistently higher at upgradient well No.1 than it is at downgradient well No. 2.[8] This would suggest an upgradient source for the contaminant, and further suggests that Glacier Lake may have an attenuating effect on POC, thus improving water quality at the nearby fen.[9] (R. at 97-101.)

Neither Hartz or Bryant's letter provided any additional sampling analysis of the June 28, 1994 sampling data. Neither Hartz nor Bryant submitted any analysis for volatile organic compounds for the June 28, 1994 round of sampling, or for any other round of sampling. No VOC screening analysis was conducted at GLE's gravel pit until after the Agency's final determination denying the permit was issued; therefore, no VOC screening was provided in GLE's response.

In addition to the Agency and GLE's communication by letters of December 27, 1994 and January 11, 1995, there were several telephone conversation between the parties, which occurred during the statutory review period, and several additional letters sent to the Agency. After sending the January 11, 1995 letters to the Agency, Hartz telephoned Yurdin on at least five separate occasions, to determine if Yurdin needed any information in addition to that in the January 11, 1995 responses. Hartz testified that he offered to meet, fax information, and do whatever it took to give the Agency additional information. (Tr. at 65-70.) In each of these phone calls, Yurdin indicated that he had not completed his review of the GLE file. (*Id.*; *see also* Tr. at 223-24, 227 and Yurdin Dep. at 19-20, 76-78, and 82.)

In a letter dated February 13, 1995, counsel for GLE responded to the Agency's letter of January 25, 1995 which was

---

[8]In Petitioner's posthearing brief, GLE's counsel clarifies that her reference to Well No. "2" is incorrect. She states that this well should properly have been designated "downgradient well No.3," and that well No. 2 is always dry. (Pet. Br. at 30, citing, Tr. at 186-187.)

[9]We take technical and administrative notice that a fen is a swampy marsh area or bog which contains alkaline decaying vegetation that may develop into peat. Active decomposition of organic matter can produce humic acid, fulvic acid and humin. (See e.g. Tr. at 177-178.)

addressed to various citizens regarding the Agency holding a hearing, and the Agency's request for groundwater information from the citizens. (R. at 97.) (*See* discussion of Agency's correspondence with citizens *infra* at page 13.) In that letter, Bryant stated that GLE viewed a hearing as inappropriate and further offered that a meeting take place. The letter states that "GLE wanted the same opportunity ... to meet with IEPA and present [Glacier Lake's] position ... that [IEPA had] offered to parties who wish to put Glacier Lake out of business." (R. at 97.) According to GLE, the Agency did not respond to this letter. However, on February 21, 1995, Robb Layman, counsel for the Agency, spoke with GLE's counsel. At hearing, Layman testified that he informed GLE's counsel that a basis for the permit denial had already been determined and that if GLE wished to address the basis of the denial, a waiver of the statutory decision deadline would be required. (Tr. at 106-107; R. at 102.)

In response, GLE's counsel sent another letter to the Agency via fax on February 22, 1995 memorializing the conversation between Layman and Bryant on February 21, 1995. (R. at 102-104.) The letter indicates that in response to Layman, Bryant asked Layman what the technical grounds for denial were, and that if the Agency provided her with a draft denial letter explaining the proposed grounds for denial, she might advise her client to agree to a 30-day extension of time to resolve the technical issues. The letter indicated that as of February 22, 1995, no draft denial letter was sent to Bryant, and that GLE would therefore, not extend the 90-day statutory period for the Agency to make a determination. (R. at 102-104.)

Also on February 22, 1995, two days prior to the permit denial, Hartz called Yurdin for the fifth time to ask him what the technical concerns were at the site so that GLE could respond immediately and not delay issuance of the permit. (Tr. at 70; R. at 102.) Yurdin replied that he had not yet finished going through the file and that there was not adequate time left to meet on the permit. (R. at 103; Tr. at 70.)

February 24, 1995 Denial Letter - the Section 39(a) Statement

On February 24, 1995, the Agency issued its final permit denial letter regarding GLE's permit application, which is the subject of the instant appeal. Essentially, the Agency denied the permit application on the basis that the information provided by GLE was insufficient to determine whether the permit would violate Sections 12 and 39 of the Act. In relevant part, the Agency's denial letter provides:

> Insufficient data has been provided to the Agency in regard to the contamination of groundwater at the site and the effects that the operation of the pit will have on the migration of the contaminants. Refer to our

> letter of December 27, 1994 and your response of January 11, 1995. The response letter contends that the contaminants originate off site. This contention, however, is not supported by the data contained in the response letter or in the application. The data provided in application form Schedule B, line 5 concerning the documentation of underground water resource which are within or which directly receive drainage from the site, was incomplete. The groundwater quality data provided indicate contamination on and off site, with a higher concentration of purgable organic carbon on site. The Agency's letter of December 27, 1994 requested additional data in terms of possible sources of this contamination and additional analysis on these samples to identify the specific compounds involved. No information on these matters was provided. No additional well sampling data were submitted for results from samples taken prior to or following the June 28, 1994 round of samples provided in the application. No information was provided concerning the effect that operations at the site will have on the further release and migration of the contaminants. (R. at 109.)

The Agency further provided that it would evaluate a revised application, and additionally issued a warning that it would be a violation of the Act to operate without a permit.

The Indicator of Contamination: Purgeable Organic Carbon (POC)

The only question of contamination raised in this record and this appeal is the Agency's concern over what it believes to be an elevated level of purgeable organic carbon, or POC at the site. At the outset, it is important to note that there is no standard for POC set by the Board. (Tr. at 138; Yurdin Dep. at 24.) POC is not a specific constituent, but is instead an indicator parameter for possible presence of certain compounds, specifically volatile organic compounds. Illinois has no regulatory requirement to monitor for POC at gravel pit mines in the State of Illinois. (Yurdin Dep. at 27; Tr. at 138.) Though the Agency has the authority to require groundwater monitoring wells through the placement of a special condition in an operating permit, the Agency has not required the placement of monitoring wells at any mines in the State because it has not viewed such a measure as necessary. (Tr. at 138; Yurdin Dep. at 28.) Additionally, for this gravel pit in particular, there is no state permitting requirement or special condition requiring that GLE monitor groundwater for POC or otherwise. GLE was not requested to provide groundwater information in its prior permit application regarding POC, other types of sampling, or on groundwater flow.

GLE does monitor groundwater quarterly for POC but does so pursuant to a conditional use permit issued by McHenry County. The county requires quarterly groundwater sampling for all gravel pit mines in the county to establish background levels for five parameters: Chlorides, Nitrate, Ammonia Nitrogen, Specific Conductivity, Partible [sic] Organic Carbons (POC) and pH. (R. at 5, 38 and 73.) The county's groundwater monitoring manual states that the county monitors groundwater for POC because it "can be present in the groundwater from a number of operational sources, including fuel spills and motor oil leakage." (R. at 85.)

Technically, POC is a fraction of total organic carbon (TOC) that can be removed from an aqueous solution by gas stripping under specified test conditions. Therefore POC represents the carbon content of all organic compounds present in a water or wastewater sample that volatilize within a specific range of temperature. In other words, POC is a measure of the carbon content of volatile organic compounds, or VOCs. Therefore, the presence of POC in groundwater indicates the presence of VOCs. However, these VOCs may or may not be constituents that are regulated under federal or State environmental programs. (*See e.g.* Yurdin Tr. at 133-134,[10] Tryon Tr. at 163.)

VOCs may be present in the groundwater as a result either of groundwater contamination or of naturally occurring processes. POC sampling may indicate the presence of VOCs in the groundwater which are associated with light distillates such as gasoline and diesel fuel. (Tr. at 135-36; *see also* Tr. at 40-52.) There are, however, other compounds which can naturally occur and be present in the purgeable organic carbon fraction. The POC result may also include organic acids such as humic acid, formic acid, formate acetate, methane gas, trihalomethane. (Tr. at 166-167.) A VOC screen could conclusively establish whether the POC level was actually the result of regulated VOCs.

Presence of Purgeable Organic Carbon at the GLE Site

The Agency testified at hearing that its concern for POC at this site stemmed from the possibility that POC detected in the groundwater could indicate the presence of VOCs. Yurdin

---

[10]When Bruce Yurdin first encountered the POC groundwater sampling results in the GLE permit application from June 28, 1994 and April, 1993, he testified that he did not know what POC was and he further testified that he did not specifically research POC. (Tr. at 118, 122, 123, 130-31, 137; Yurdin Dep. Tr. at 92.) Instead, he relied on the McHenry Analytical Laboratory report which stated that POC is a total sum of VOCs. (Tr. at 118; Yurdin Dep. 32-33.))

testified that it is possible that fuel spills from fuel leaking through the soil and into the groundwater could account for the presence of POC. (Tr. at 135-136.) However, Hartz testified that GLE has never had a spill from fueling operations and such a situation appears unlikely given the operations of the site, since GLE stores no fuel, conducts fueling of vehicles away from the open pit on an area that is either concrete or clay with greater than 100% compaction, and has a contingency plan which includes training sessions, for dealing with spills should they occur. (Hartz, Tr. at 40-56.)

On the issue of whether the operations of a sand and gravel mining operation could contribute to groundwater pollution, Yurdin explained in his deposition that while it is possible, he could cite no actual examples of this problem occurring in Illinois. He explained that when the overburden of top soil is stripped off, the groundwater is left in a generally vulnerable state and that the capacity of the remaining rock and material to attenuate any kind of spill or other contaminant would be at a low level. (Yurdin Dep. at 25.) However, the two examples offered by the Agency regarding groundwater contamination at a gravel pit had to do with extenuating circumstances being present at the site. For one gravel pit, a neighboring landfill had leachate problems which contributed to groundwater pollution on the site and at a second gravel pit, naturally occurring metals and other contaminants were present in the groundwater. (Yurdin Dep. at 26.)

On behalf of GLE, Tryon testified that in his experience of providing analysis for 15 or 16 sand and gravel pits in McHenry County and conducting between 200 and 400 POC analyses (Tr. at 153), the presence of POC in the groundwater does not necessarily correlate to a presence of regulated VOCs. He cited several examples from an Illinois State Water Survey study, *An Assessment of Regional Ground-Water Contamination in Illinois*[11] where high POC readings were detected which, once screened for VOCs, did not show the presence of regulated VOCs. (Tr. at 172.)[12] Based on his review of the ISWS study and conversations with its authors, Mr. Thomas Holm and Michael Barcelona, and additionally on the *Practical Handbook of Ground-Water Monitoring*, Tryon testified that the range for total organic carbon which naturally occurs in aquifers is between 1 mg/1 and 10 mg/1 (Tr. at 173-74, 194; Pet. Exh. #7) and the purgeable fraction of TOC, or POC, is between 5

---

[11]This document was admitted at hearing as petitioner's Exhibit #6.

[12]The two examples cited by Tryon from the study where POC level readings of 1.1 mg/1 in a municipal drinking water well in Woodstock, Illinois and POC readings of 21.9 mg/1 in a drinking water supply in Meredosia, Illinois, where at each source, there were no VOCs detected. (Tr. at 172; Pet. Exh. #6 at 15-16.)

and 50 percent. (Tr. at 175; Pet. Exh. at 13.) Therefore, he opined that the naturally occurring range for POC in Illinois aquifers is between .05 mg/ and 5 mg/1 (Tr. at 175-76) and that the POC levels at the GLE site are typical of the levels seen at similar gravel pits for which the McHenry Analytical Laboratory provides the laboratory analysis. (Tr. at 175.)[13]

Citizen Interest in the Operating Permit Application

While the record in this case shows substantial citizen interest in the permit application submitted to the Agency GLE during the permit review process, the Board notes that few members of the public attended our hearing and only one offered a public comment on the record.[14] Prior to the Agency's receipt of GLE's permit application on November 28, 1994, the Agency received 25 letters all dated October 19, 1994 from private citizens asking that the Agency hold a public hearing on the Glacier Lake permit application. (Pet. Mot. to Supp. the Record, Exh. A.) One of these letters was from a McHenry County Board Member, and the Agency received an additional letter from a second member of the McHenry County Board dated October 24, 1994. Additionally, the Agency received a letter on January 19, 1995 from an Illinois State Representative. Each of these letters requested that a public hearing be held. (*Id.*)

In response to the citizens who had written the Agency regarding a public hearing on the application, the Agency sent out a letter on January 25, 1995 which requested specific information regarding groundwater quality. (Mot. to Supp. Record, Exh. A.) In response, the Agency received two letters from citizens, one of which was a group letter signed by 31 residents. Both letters expressed the citizens' concern for groundwater, and requested that GLE be required to identify the

---

[13]In support of his opinion that regulated VOCs are not present in a quantity to be threat to groundwater, or to violate the Act, Tryon testified that the results of a VOC screening analysis conducted in March of 1995 after the permit denial letter was issued, demonstrate that even though the POC levels vary from 94 to 886 ug/L, there were no VOC levels detected at the site. VOC screening analysis for each groundwater monitoring well was admitted at hearing as Petitioner's Exh. #9 over the objection of the Agency who had concerns that the data was collected after the permit denial letter issued as was therefore, not a part of the Agency's record. (Tr. at 213-15.) Since this information was not part of the record before the Agency, we will not consider this data, as this is not a de novo review of the Agency's final decision. (IEPA v. IPCB (5th Dist. 1983) 118 Ill. App.3d 772; 74 Ill. Dec. 158, 164.)

[14]In both her comments at hearing and in her posthearing comments, Pettry expressed her opposition to issuing a permit to GLE and dissatisfaction with GLE's explanation of the source of the POC readings. She believes it is not satisfactory to explain the source of the POC as originating off-site and for GLE to also state that the gravel pit may have an attenuating effect. (Pettry Comment, at 3-4.)

source of POC at the site, and the citizens' belief that a public hearing is appropriate in this case. (Yurdin Dep. Exh.# 17 and 18.)[15]

When GLE's counsel, Bryant, learned of the correspondence between the citizens and the Agency, she sent a letter to Robb Layman, expressing GLE's position that it did not favor a public hearing being held in this case. (R. at 97-99.) She also specifically requested a meeting with the Agency. (R. at 101.) The basis of her opposition to the public hearing was that the Agency did not have the authority to extend the permit review period in order to hold a public hearing. Additionally, in other letters in the record, GLE expressed a desire early on in the permit application process that the Agency conduct an expedited review if possible, based on GLE's desire to obtain a valid operating permit and continue operating, and in order to resolve the outstanding concerns regarding the transfer of ownership issue.[16]

ARGUMENTS OF THE PARTIES

Glacier Lake Extraction

Indicating that this case is "not an ordinary permit appeal" (Pet. Br. at 1), GLE has enumerated a litany of arguments as to why the permit denial was improper. It argues that the Agency did not rely on valid, technical grounds for its denial. Instead, it posits that the Agency denial was motivated in part by its desire to hold a public hearing during the 90-day statutory review time, and that the denial letter is insufficient and was obviously drafted at the last minute. More specifically, GLE argues that the Agency's February permit denial letter itself is both technically and legally insufficient.

Technically, GLE argues that the denial fails to provide any specific technical reasons, but instead merely alludes to a possibility of contamination at the site as a result of POC being present in the groundwater. GLE argues that the POC levels were not and are not a problem at the site, and further argues that

---

[15]Additionally, the record also shows that the Agency held at least three meetings with various citizens to discuss the GLE site prior to the application being filed as well as one which took place after the application's submission. (Yurdin Dep. at 53-54, 60; Tr. at 232.)

[16]A second GLE counsel, Donald Stinespring, sent a letter dated January 24, 1995 to the Agency requesting expedited review of the permit on the basis that GLE had been barred from obtaining a McHenry County operating permit since the State had taken the position that the underlying State 1990 operating permit was invalid due to the transfer of ownership issue and that such a position was putting an economic burden on several associated businesses. (R. at 90-91.)

there is no evidence which supports the Agency's conclusion that there is or may be groundwater contamination as a result of GLE's operation. GLE cites the uncontroverted testimony of its expert, Michael Tryon, for the proposition that all POC levels at this site are within naturally occurring ranges, and that the Agency has no technical basis to conclude that the POC level is an appropriate basis for the conclusion that the groundwater is threatened. Petitioner argues that the testimony of the Agency's own witness, Bruce Yurdin, indicates that the denial was based on mere "assumption," as he testified that he did not initially even have knowledge of what POC was and he did "no research whatsoever" to determine whether the specific level of POC indicated a presence of pollutants. (Pet. Br. at 27, citing Yurdin Test. Tr. at 123.).

Moreover, GLE argues that there is no evidence that the operation of the pit is having an adverse effect on the area groundwater or that any contaminants are migrating in or around the pit. GLE points out that the Agency requested no specific information about the gravel pit operations or about how the operations may have caused POC to be present in the groundwater. While Yurdin testified at hearing that POC could be present in groundwater due to fuel spills leaking through the soil and into the groundwater, GLE contends that no fuel is stored on site, nor is there evidence that fuel spills have occurred, or much less had an impact on groundwater. (Pet. Br. at 28-29.) Additionally, GLE asserts that the entire operation uses plain water which simply forces the natural sand and gravel through a series of screens, and no chemicals or explosives which might contribute to any contamination are used at the gravel pit.

GLE also argues that the denial is based upon reasons which should have been better articulated by the Agency during its permit review process since the denial is based, in part, upon a lack of information that GLE claims it was not on notice that the Agency required, information that GLE claims it could have and would have provided had the Agency indicated it was necessary. GLE cites *Wells Manufacturing v. IEPA*, 195 Ill. App.3d 593, 553 N.E.2d 1074 (1st Dist. 1990), for the proposition that the Agency was under a duty to let GLE know, in specific terms, what information it needed to make a decision. GLE contends that it responded to the information requests in the December 27th letter, and that to deny its permit on the grounds stated in the permit denial letter, without telling GLE what additional information might be required, violated due process. GLE argues that it made several offers by both telephone and letter to provide any additional information the Agency might need, and that the Agency did not respond, but instead waited until the last minute to make the decision to deny the permit based on "incomplete information."

More specifically, GLE argues that the information it

provided to the Agency in response to the December 27th request concerning POC ("Please provide data on ... the possible source(s) of the POC detected in the samples") was sufficient. Likewise, GLE argues that it is not reasonable to deny the permit because it did not conduct VOC screening, since the Agency's December letter stated only that "If additional analyses were conducted on these same samples to identify specific volatile organic compounds, please provide the results." Since GLE had not conducted a VOC screen, and since the Agency did not indicate more specifically that one was necessary, GLE argues that it was not under an obligation to provide such information.

Ultimately, GLE argues that since it had no way of knowing that the Agency would issue a denial based on the POC results, it can not now be held responsible for failing to prove to the Agency that the application would violate the Act. While GLE was requested to provide possible sources of POC, GLE asserts that it could not have expected or known that the Agency considered POC to be a contaminant that was threatening the groundwater since there is no regulation or standard concerning POC, and there are no procedures or criteria promulgated for the Agency's review for gravel pit mining permit issuance. (Pet. Br. at 34.) Further, since the Agency admitted that gravel pits are not normally even required to test the groundwater, and GLE was not required to do so under its prior permit, and GLE is the only gravel pit in the State that has been asked to provide POC data, GLE argues that the Agency seeks to hold it to an *ad hoc* standard, which it is specially creating for GLE. (Pet. Br. at 33-34.) GLE believes the Agency's denial is especially egregious under *Wells Manufacturing* in light of GLE's repeated requests to the Agency to supply any further information or to hold a meeting. (Pet. Br. at 27, *citing, Wells*, 195 Ill. App.3d at 597.)

In sum, GLE maintains that the information submitted to the Agency during the permit review period is sufficient to provide the Agency with knowledge that no violation of the Act would occur if this permit had been granted.

The Illinois Environmental Protection Agency

In support of its final determination to deny the permit to GLE, the Agency argues that GLE has not met its burden of proving that the permit, as applied for to the Agency, would not violate the Act or the Board's regulations. The Agency contends that the data GLE did provide shows a high level of POC in the groundwater, that POC is indicative of possible contamination at the Glacier Lake facility, and that no factual information was provided by GLE during the Agency's statutory review period which indicates that there was no contamination or that the contamination was "unrelated" to the mining operations. According to the Agency, the application and GLE's responses to the Agency's December 27th letter were missing hydrogeologic data

regarding the flow of the groundwater and information regarding the presence of POC and VOCs in the groundwater. (Agency Br. at 6-7; Tr. at 142-143.) The Agency argues that at the time of its February 24, 1995 decision, it had insufficient information to determine whether the POC were originating "off-site" or "on-site", or to determine the significance of the presence of POC at the site. (Pet. Br. at 11.)

The Agency argues that, at hearing, it provided an adequate reason for having concerns regarding this site. Yurdin supported his concern for POC by testifying it is possible that POC contamination of groundwater could occur from gasoline or diesel fuel spills or leakage onto the ground, and consequently, seepage could take place, passing through the soil and into the groundwater. The Agency further argues that existence of POC in the groundwater is indicative of the presence of light distillates, including gasoline and diesel fuel, and that GLE never provided any data during the statutory review period which would corroborate GLE's argument on appeal that there is no VOC problem at the site. Regarding the VOC screen that GLE did provide after the permit denial and prior to hearing, the Agency argues that the data cannot be used as a basis to overturn the permit denial since the Agency was not provided with the VOC analysis during the permit review process. The Agency argues that the Board cannot consider information that was not before the Agency in making its permit denial decisions.

Ultimately, the Agency takes the position that the petitioner was under an obligation to present everything necessary for the Agency to make a determination that the issuance of a permit would not violate the Act. The Agency argues it was under no obligation to request any additional information from the petitioner and the Agency believes that GLE was always free to submit any information that it felt was necessary to show that no violation would occur if the permit were to issue. Regarding the issue of communication with representatives of GLE, the Agency testified that it was not unusual for the Agency to take the entire 90-day period to make a decision and in this case the decision was not made until the 90th day.

RELEVANT LAW

The Illinois Environmental Protection Act establishes a system of checks and balances integral to the Illinois system of environmental governance. Concerning the permitting function, it is the Agency who has the principal administrative role under the law. Specifically, the Agency has the duty to establish and administer a permit process as required by the Act and regulations, and the Agency has the authority to require permit applicants to submit plans and specifications and reports regarding actual or potential violations of the Act, regulations

or permits. (*Landfill, Inc. v. IPCB* (1978) 74 Ill. 2d 541; 25 Ill. Dec. 602, 607 *citing*, 415 ILCS 5/4.) Further, the Agency has the authority to perform technical, licensing and enforcement functions. It has the duty to collect and disseminate information, acquire technical data, and conduct experiments. It has the authority to cause inspections of actual or potential pollution sources and the duty to investigate violations of the Act, regulations and permits. (*Id.* at 606)

Regarding permits, the Act provides that it "shall be the duty of the Agency to issue such a permit upon proof by the applicant that the facility ... will not cause a violation of this Act or of regulations hereunder." When the Agency makes a decision to deny a permit, the Act provides that it must transmit to the applicant a detailed statement as to the reasons for the denial. The statement shall include, at a minimum, the sections of the Act or regulations which may be violated if the permit were granted; the specific type of information, if any, which the Agency deems the applicant did not provide the Agency; and a statement of specific reasons why the Act and the regulations would be violated if the permit were granted. (415 ILCS 5/39 (a)(1)-(4).) Finally, the Act charges that the Agency "shall adopt such procedures as are necessary to carry out its duties under this [the permitting] section." (415 ILCS 5/39 (a).)

After the Agency's final decision on the permit is made, the permit applicant may appeal that decision to the Board. (415 ILCS 5/40(a)(1).) The Board then holds a hearing between the parties at which the public may appear and offer comment. The question before the Board in a permit appeal is whether the applicant has met its burden of proving that issuance of the permit would not violate the Act. It is well-settled that our review in most types of permit appeals including this one, is not de novo but is limited to information submitted to the Agency during the Agency's statutory review period, and not on information developed by the permit applicant, or the Agency, after the Agency's decision. (*See Alton Packaging Corporation v. IPCB*, (5th Dist. 1987) 162 Ill. App. 3d. 731; 516 N.E.2d 275, 280.) However, it is the hearing before the Board that provides a mechanism to the petitioner to prove that the application would not violate the Act. Further, the hearing affords the petitioner with the opportunity "to challenge the reasons given by the Agency for denying such permit by means of cross-examination and the Board the opportunity to receive testimony which would 'test the validity of the information [relied upon by the Agency]'" (*Alton Packaging Corporation v. IPCB* (5th Dist. 1989) 162 Ill. App. 3d 731; 114 Ill. Dec. 120, *quoting, IEPA v. IPCB*, 115 Ill. 2d at 70.)

Under the Act, both the Agency and the Board operate under tight statutory time frames to make a decision. For the Agency, the statutory time to issue a permit decision is 90 days. (415

ILCS 5/39 (a).) For the Board, the statutory-required time period is 120 days. During this time, we must hold a hearing, review the evidence and arguments, and make a final decision concerning the Agency's permit decision. (415 ILCS 5/40 (a)(2).)

ANALYSIS

It is well-established that the issues before the Board in a permit review are framed by the Agency's denial letter. (*See Centralia Environmental Services, Inc. v. IEPA* (May 10, 1990) PCB 89-170, slip op. at 6.) We must therefore determine whether the stated reasons in the Agency's February 24, 1995 final decision to deny GLE an operating permit are proper. Those reasons are the Agency's concern that the issuance of the operating permit might result in a violation of the Act and that it had insufficient information to determine whether the application as submitted would violate the Act or Board regulations. In order to reach a decision on the propriety of the denial letter, we must consider whether the petitioner has satisfied its burden of proving that no violation of the Act or the regulations would occur if the permit were to issue. For the following reasons we believe that GLE has in this case.

As an initial matter, we note that the denial letter itself vaguely states that Section 12, the prohibitory language in the Act making it unlawful to contaminate the water of the State of Illinois, may be violated if the permit were to issue. (415 ILCS 5/12.) While Section 12 sets forward specific subsections regarding how the waters are being contaminated, (*See* Section 12(a)-(h)), the letter itself fails to provide any explanation of what paragraphs of Section 12 might be violated by GLE's operation. While the Agency voiced concerns that there may have been a fuel spill, such concerns were not raised until the hearing and were specifically denied by GLE.

We nevertheless conclude that its decision to deny the permit because of the POC readings, was not proper. POC is merely a measurement which quantifies the carbon content of VOCs present in a sample. It does not necessarily indicate an exceedence of a groundwater quality standard for a regulated VOC. (*See* 35 Ill. Adm. Code Part 620.) Even after a POC test is performed, the POC result itself is subject to interpretation as to what the reading represents and, furthermore, there is no regulatory standard against which to judge whether the POC reading is high, low or normal. The Agency's position during this appeal, and the position which appears to have led to its conclusion that the operation may be causing a violation of the Act, is that the POC levels may be elevated at the site.

We are persuaded by the testimony of GLE's expert that the POC readings at this site are within naturally occurring ranges. GLE's expert has reviewed between 200 and 400 POC tests in his

review of the groundwater sampling analysis for 15 or 16 gravel pits in McHenry County, and he believes that it is just as likely that the POC readings at this site reflect the existence of naturally-occurring constituents such as humic acid (which are not regulated VOCs under Part 620), as it is to reflect the presence of VOCs (which are regulated and have groundwater quality standards, which if exceeded would cause a violation of the regulations and the Act).

Further, there is no evidence in this record that the operations of this site in any way caused or contributed to any alleged contamination. This site does not use any chemicals or explosives in its mining operations which would potentially cause groundwater contamination with VOCs. This is a simple operation whereby GLE scrapes off earthen material, merely washes sand and gravel with plain water, and sorts the material according to the size of the gravel. While the Agency conjectures that there may have been a fuel spill, the petitioner specifically denies that any spill occurred during its operation. Moreover, we note that while there is evidence of other actions pending against GLE for continued operation of the site regarding the permit/ownership issue, none of these actions appear to be initiated by the State or McHenry County for violation of groundwater standards.[17]

Since the Agency denial was based upon the assertion that it lacked the necessary information it needed to evaluate whether or not the permit would violate the Act, and since it would have us uphold its denial for GLE's alleged failure to provide the information it says it wanted, we make the following comments. The Agency has every right, and an obligation to the people of the State of Illinois, to request of a permittee all information necessary to show that its operation will not violate the Act. This is particularly so when the Agency has sufficient reason to suspect that there might be a problem. Indeed, in some cases, particularly when the applicant seeks a renewal permit, the courts have also held that the Agency has an obligation to inform the permittee of its concerns and give notice as to what information needs yet be presented to resolve those concerns. (*See e.g. Wells Manufacturing v. IPCB*, 195 Ill. App. 3d 593 (lst Dist. 1990); *Celotex Corp. v. IPCB* (1983) 94 Ill. 2d 107, 68 Ill. Dec. 108, 445 N.E.2d 752 *and Reichhold Chemicals v. IPCB* (5th Dist. 1990) 207 Ill. App.3d 974, 566 N.E.2d 724.) Obviously, the Agency attempted to comply with those cases when it sent GLE the December letter requesting more information.

When such information is requested, then, the permittee has

---

[17]We also note that if the Agency discovers new evidence which leads it to conclude that the GLE operation is causing groundwater contamination in violation of the Act, the Agency is always free to institute an enforcement action pursuant to Section 12 of the Act.

the additional burden of going forward to produce the evidence requested in order to meet its burden that the permit would not violate the Act. We disagree with the Agency, however, on the point that GLE did not provide the information requested. Rather, we believe that the information provided by GLE was sufficient given the nature of the questions raised and the information solicited by the Agency. The Agency's denial letter mischaracterizes its December request for more information. The denial says that letter "requested . . . additional analysis on these samples to identify the specific compounds involved." It did not. It requested such data only "if available," and arguably only concerning the June 28, 1994 sampling.

When the Agency undertakes, as is quite appropriate and sometimes required, to provide a permit applicant with written requests for more information, the Agency must carefully consider what it is that it is requesting. The Agency cannot deny a permit application on the basis that it lacks information which its earlier request leads one to reasonably conclude only needed to be provided "if" it was available. If the Agency had a serious enough concern to deny this permit as a result of the POC levels, and only a VOC screen would conclusively establish whether the POC number is indicative of contamination, it should not have suggested that VOC data be provided only "if available." It should have required such data.

Moreover, the evidence is uncontroverted that the Agency had ample opportunity, pursuant to numerous phone calls and requests for meetings made by GLE's representatives, to more directly request the VOC sampling and have the record set straight. In factual situations such as these, where miscommunication confuses the decision-making process, promulgation of permit procedures or criteria could aid the permit review process.

DECISION

Under the facts of this case, where a mining operation has been active at this site for the past fifty years and has been permitted for at least the last five years, the mere detection of POC in the groundwater, which may or may not be an indication of contamination, does not constitute a sufficient basis for complete denial of the mining permit. This is particularly so under circumstances where the Agency has not as a general practice required the submittal of data concerning POC at mining sites, and where the Agency's request for additional data did not specifically request an analysis of the particular regulated VOCs present, if any.

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

ORDER

The Board hereby reverses the Agency's determination dated February 24, 1995, denying Jack Pease d/b/a Glacier Lake Extraction's application for a mine-related operating permit. This matter is remanded to the Agency for issuance of an operating permit with standard and special conditions consistent with this opinion and order and GLE's prior operating permit.

IT IS SO ORDERED.

Board Member E. Dunham concurred.

Section 41 of the Environmental Protection Act (415 ILCS 5/41) provides for the appeal of final Board orders within 35 days of the date of service of this order. (*See also* 35 Ill. Adm. Code 101.246, Motion 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 20th day of July, 1995, by a vote of 6-0.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board