ILLINOIS POLLUTION CONTROL BOARD
February 5, 1998

PEOPLE OF THE STATE OF ILLINOIS,	)	
	)	
Complainant,	)	
	)	
v.	)	PCB 96-107
	)	(Enforcement - Air - Land - Water)
ESG WATTS, INC.,	)	
	)	
Respondent.	)	

THOMAS DAVIS AND AMY SYMONS-JACKSON,[1] ASSISTANT ATTORNEYS GENERAL, APPEARED ON BEHALF OF COMPLAINANT; AND

CHARLES J. NORTHRUP OF SORLING, NORTHRUP, HANNA, CULLEN & COCHRAN, APPEARED ON BEHALF OF RESPONDENT.

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

This matter comes before the Board pursuant to an eight-count complaint filed by the Illinois Attorney General, on behalf of the People of the State of Illinois (complainant) and at the request of the Illinois Environmental Protection Agency (Agency), against ESG Watts, Inc. (ESG Watts). Complainant alleges various violations of the Environmental Protection Act (Act) related to ESG Watts' operation of a municipal solid waste landfill, known as the Watts/Taylor Ridge landfill (landfill), which is located in Rock Island County, Illinois.

Specifically, complainant alleges that, through the operation of the landfill, ESG Watts committed various violations of the Act and Board rules related to: cost estimate and financial assurance obligations; landfill operational obligations; inadequate coverage and leachate; National Pollutant Discharge Elimination System (NPDES) permit requirements; runoff and water pollution; groundwater contamination; and air pollution from landfill gas and odor. Notably, as a penalty for these violations, complainant seeks revocation of ESG Watts' permit to operate the landfill. Further, complainant seeks monetary penalties, a cease and desist order, and attorney fees.

After an extensive period of discovery, the Board held hearings on the complaint before then-Board Hearing Officer Deborah L. Feinen[2] on October 29-30, 1996, and again on

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[1] Subsequent to the completion of the record in this matter, Amy Symons-Jackson filed a withdrawal as attorney of record in this proceeding. She has since been hired as a hearing officer at the Board. She has not participated in any of the deliberations in this matter.

[2] Upon the resignation and December 31, 1997, departure of Ms. Feinen, and subsequent to the completion of the record, the Board appointed Kathleen Crowley as the hearing officer in

December 12, 1996. The parties filed post-hearing briefs. The compiled record, consisting of over 900 pages of testimony, 82 exhibits and over 100 photographs, forms the basis of the Board's decision in this matter.

A number of procedural issues were raised by both parties and are discussed, and resolved, in this opinion. Among those procedural issues are: whether complainant can amend its pleadings and complaint to conform to certain record evidence; whether certain evidence offered by complainant at hearing should be allowed; whether certain proffered supplementation to the record should be allowed, whether certain pre-1992 evidence, offered as evidence of water pollution, should be barred upon the principal of *res judicata*; and whether certain other evidence should be barred upon the principal of *laches*.

As more fully explained below, the Board finds ESG Watts in violation of the following sections of the Act: Sections 9(a), 12(a), 12(d), 12(f), 21 (d)(1), 21(d)(2), 21(o)(5), 21(o)(6), 21(o)(13), and 21.1(a) (415 ILCS 9(a), 12(a), 12(d), 12(f), 21 (d)(1), 21(d)(2), 21(o)(5), 21(o)(6), 21(o)(13), and 21.1(a) (1994)). The Board also finds ESG Watts in violation of the following Board regulations: 35 Ill. Adm. Code 302.203, 304.120(c), 304.124(a), 304.141(a), 305.102(b), 620.115, 620.301, 620.405, 807.305(a), 807.305(b), 807.305(c), 807.312, 807.313, 807.314(e), and 807.623. Further, the Board finds ESG Watts in violation of various permit requirements including Special Condition 8 of Supplemental Permit No. 1991-292-SP, Special Conditions 2 and 18 of Supplemental Permit No. 1993-167-SP, and Special Conditions II.7, II.8 of Supplemental Permit No. 1996-087-SP. After due consideration of the statutory factors found at Section 33(c), as well as Section 42(h) of the Act (415 ILCS 5/33(c), 5/42(h) (1996)), the Board revokes ESG Watts' operating permit No. 1972-72-DE/OP. The Board further orders ESG Watts to pay a penalty in the amount of $100,000, as well as attorney fees in the amount of $26,567.

PROCEDURAL BACKGROUND AND PRELIMINARY MATTERS

Prior to complainant's filing of this complaint, the Agency provided ESG Watts with notice of the alleged violations and an opportunity to meet pursuant to Section 31(d) of the Act (415 ILCS 5/31(d) (1994)). The Agency sent enforcement notice letters, pursuant to Section 31, on May 11, 1995, and August 4, 1995. A meeting was held between all of the parties on August 16, 1995. Consequentially, the complaint in this matter was filed on November 16, 1995, pursuant to Section 31(a) of the Act (415 ILCS 5/31(a) (1994)), requesting that the Board order ESG Watts to cease and desist from further violations and requesting a penalty and attorney fees.

On December 1, 1995, ESG Watts filed a motion to dismiss. The Board denied this motion on January 4, 1996. See People v. ESG Watts, Inc. (January 4, 1996), PCB 96-107. The parties subsequently entered into a written and oral discovery schedule. On May 30, 1996, complainant filed a supplemental pleading which altered the request for relief from the Board. The pleading requested that the Board revoke ESG Watts' operating permits for the

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this matter. As such, ESG Watts' motion for substitution of hearing officer filed on January 27, 1998, is stricken.

landfill as a penalty for the violations alleged in the pending complaint. The supplemental pleading also alleged continuing violations of all counts of the complaint from the date the complaint was filed, up through and including the date of the hearing.

On July 15, 1996, ESG Watts filed a motion for continuance, arguing that it needed additional time for discovery. By hearing officer order of July 17, 1996, the hearing officer granted ESG Watts' motion and ordered an October 1, 1996, deadline for discovery to be completed by all the parties. On October 10, 1996, complainant filed a motion for sanctions due to alleged violations of discovery rules. The hearing officer denied this motion on October 17, 1996. On October 21, 1996, ESG Watts filed a motion for protective order, requesting that ESG Watts' corporate tax records and financial data be sealed from the public. The hearing officer denied that motion on October 28, 1997.

A three-day hearing was held on October 29-30, 1996, and December 12, 1996. On December 9, 1996, ESG Watts filed a motion to extend the hearing scheduled for December 12, 1996, which motion the hearing officer denied. During the three days of hearing, complainant presented eight witnesses including: Agency employees Bill Child, chief, Bureau of Land; James Kammueller, manager, Water Pollution Control, Peoria Regional Office; Ronald Mehalic, environmental protection specialist; Kenneth Liss, groundwater unit manager of the permit section in the Bureau of Land; John Taylor, financial assurance analyst; Joyce Munie, solid waste unit manager of the permit section in the Bureau of Land and, additionally, landfill neighbors Joe Whitley, Jerry Martens, and Wayne Siebke. Also, landfill neighbor Heidi Schultz testified as a member of the public. On behalf of ESG Watts, nine witnesses testified including Watts' employees Joe Chenoweth, landfill supervisor; Jerry Eilers, vice president of Watts Trucking Service Company; Steve Grothus, project manager for landfill division; Tom Jones, engineer; and John Reiser, technical representative and certified operator at Sangamon Valley landfill, as well as Mark Mehall, solid waste coordinator of the Rock Island County Waste Management Agency; Steve Keith, environmental engineer at CH2MHill; Robert Fortelka, resident engineer at Resource Technology Corporation (RTC) and Steve Brao, environmental consultant and president of Noble Earth Corporation.

Complainant filed its brief on January 21, 1997; ESG Watts filed its brief on February 10, 1997; and complainant filed its reply brief on February 24, 1997. The Board will now resolve the post-hearing evidentiary motions which remain for resolution.[3]

Complainant's Motion to Conform Pleadings to Proof

In this motion, filed on January 23, 1997, complainant seeks to present two new allegations for the Board's resolution. Complainant believes these new allegations conform to the proof adduced at hearing. Pursuant to Section 103.210(a) of the Board's Procedural Rules, 35 Ill. Adm. Code 103.210(a) (1994),[4] complainant seeks Board consideration of these post-

[3] Complainant's January 22, 1998, motion for request of decision is denied as moot.

[4] Section 103.210(a) provides that "[proof] may depart from pleadings and pleadings may be amended to conform to proof, so long as no undue surprise results that cannot be remedied by a continuance." See 35 Ill. Adm. Code 103.210(a) (1994).

hearing allegations. ESG Watts objects, arguing that pleadings cannot be amended after hearing and that, as to one of the allegations, the new allegation would result in undue surprise and, for that reason as well, should be disallowed. ESG Watts also argues that these new claims are precluded by Section 31(d) of the Act (415 ILCS 5/31(d) (1996)) since no meeting took place between the Agency and ESG Watts. As the Board has recently held that the new Section 31 requirements apply only to the Agency's action prior to referral to the Attorney General, we disagree that the claims are precluded by Section 31. See People v. Geon (October 2, 1997), PCB 97-62.

The first allegation complainant raises in this motion deals with ESG Watts' failure to fully fund the financial assurance trust fund, the mechanism by which ESG Watts guarantees the State that it has enough money on reserve to adequately provide for closure and post-closure care of the landfill. Proof of such inadequacy was adduced at hearing through the testimony of Mr. Taylor, a financial assurance analyst for the Agency, and is uncontested. The charge is very closely related to complainant's pre-existing count I, dealing with ESG Watts' failure to file cost estimates for closure. Section 103.210(a) plainly allows post-hearing motions to amend pleadings based upon proof adduced at hearing, so long as no surprise resulted (35 Ill. Adm. Code 103.210(a)). This allegation is a natural outgrowth of the hearing and discovery process and, as our hearing officer correctly observed, it comes as no surprise. Accordingly, the Board will allow the motion to conform as to the financial assurance allegation.

Complainant's second claim alleges that ESG Watts has violated its permit requirements concerning the height of its landfill. This claim is based upon the testimony of an ESG Watts' witness at the very final stages of the hearing. Throughout the entire discovery process, complainant never once raised an issue concerning vertical elevation in excess of permit limits. The Board agrees with ESG Watts that this allegation results in unfair surprise and disallows ESG Watts from providing an informed evidentiary response. Further, given the character of the testimony regarding the overage, adequate evidence of this potential violation is lacking. Accordingly, the Board will not allow this portion of the motion to amend. The motion is granted as to the financial assurance allegation and denied as to the vertical expansion issue.

Complainant's Motion to Allow Offer of Proof and the Parties' Various Motions to Supplement Record

The Board discusses these motions collectively as all but one of the motions to supplement relate to one substantive issue before the Board: the various positions of the parties on the Agency's denial of ESG Watts' significant modification (sig mod) permit.

At hearing on December 12, 1996, the Board's hearing officer rejected complainant's attempt to introduce evidence of the Agency's denial of ESG Watts' sig mod permit, which denial letter was written shortly before the hearing. The hearing officer disallowed the evidence because she determined that the presentation of such evidence violated her discovery order. Over the hearing officer's objection, complainant offered proof of the evidence and filed a motion for offer of proof with the Board on January 23, 1997. Complainant seeks to

have the Board allow the testimony our hearing officer disallowed. The Board will not disturb the determination of our hearing officer on the evidentiary issue. Arguments of complainant aside, the hearing officer's determination was clearly within her authority pursuant to Sections 101.220(m) and (n) of the Board's Procedural Rules (35 Ill. Adm. Code 101.220(m)(n)). Moreover, we fail to see how the proffered evidence of this permit denial is directly relevant in this enforcement proceeding. The permit denial is the subject of an appeal which is currently pending.[5] Accordingly, complainant's motion to offer proof is denied.

Based upon the information contained in complainant's offer of proof, ESG Watts has filed several motions to supplement the record. The first four motions and the sixth motion are each based upon information which ESG Watts wishes to present on the question of the permit submission and denial. As stated above, the Board does not see the relevance of the merits of ESG Watts' permit submission and denial in this enforcement proceeding. Indeed, such evidence is misplaced and unnecessary as it is merely offered in response to complainant's offer of proof, which we have disallowed. Accordingly, ESG Watts' various motions to supplement are also denied.

On January 27, 1998, complainant filed a motion to supplement the record. In the motion, complainant desires to update the Board with information on ESG Watts' status of the financial assurance amount. Further, on January 29, 1998, ESG Watts submitted a fifth motion to supplement the record to also inform the Board of the status of the financial assurance amount. In that the record has been closed since the close of the briefing stage, the Board will not hear such motions. The motions and information contained therein do not substantially aid the Board in determining a penalty for violations which have already occurred. Accordingly, the motions are stricken from the record and are not considered by the Board in this matter.

ESG Watts' Arguments Regarding Pre-1992 Water Evidence

ESG Watts argues that under the doctrine of *res judicata*, any pre-1992 water violations should be barred because such violations were previously prosecuted in the September 11, 1992, Sangamon County Circuit Court case, People v. Watts Trucking Service, Inc. No. 92-CH-23 (Cir. Ct. Sangamon Co.). Resp. Br. at 4-5.[6] Complainant states that it is not

[5] The currently pending sig mod appeal to which this motion refers to is docketed at the Board as ESG Watts, Inc. v. Illinois Environmental Protection Agency, PCB 95-110. There is also another pending sig mod permit appeal pending at the Board that is docketed as ESG Watts, Inc. v. Illinois Environmental Protection Agency, PCB 98-38.

[6] Citations to the transcripts will hereinafter be cited to as "Tr. at ___." Citations to the complaint will be cited as "Comp. at _____." Citations to the briefs of complainant will be cited to as "Comp. Br. at _____"; and "Comp. Reply Br. at _____." Citations to ESG Watts' brief will be cited to as "Resp. Br. at _____." Citations to ESG Watts' response to complainant's request for the admission of facts regarding previously adjudicated violations will hereinafter be cited to as "Resp. to Previous Violations at _____." Citations to ESG Watts' response to complainant's request for the admission of facts regarding newly alleged violations will hereinafter be cited to as "Resp. to New Violations at _____."

relitigating any violations which have already been adjudicated against ESG Watts. Comp. Reply Br. at 2. Complainant asserts that the effluent and water quality violations from the July 1986 inspection and the NPDES permit violations that have occurred since the permit issuance in October 1986, were not previously included in the Sangamon County Circuit Court case.

The doctrine of *res judicata* operates such that "a final judgment rendered by a court of competent jurisdiction on the merits is conclusive as to the rights of the parties and their privies, and, as to them, constitutes an absolute bar to a subsequent action involving the same claim, demand or cause of action." Torcasso v. Standard Outdoor Sales, Inc., 157 Ill. 2d 484, 490, 626 N.E.2d 225, 228 (1993). In that the Sangamon County Circuit Court case previously heard before Judge Richard Cadagin involved the same parties as in the instant matter, and because the water pollution violations prior to 1992 are also substantially the same violations as in the previous circuit court case, the Board finds that any allegations prior to 1992 pertaining to water pollution should not be considered, and are therefore stricken.

ESG Watts' Arguments Regarding *Laches*

ESG Watts argues that many of complainant's allegations should be barred by the doctrine of *laches*. ESG Watts asserts that in the narrative attached to a July 16, 1986, Agency inspection (Comp. Exh. 5), the Agency relies on sampling results which identify a violation with respect to suspended solids. ESG Watts argues that such reliance by the Agency on a nine-year-old violation is "patently unreasonable" in bringing an enforcement action. Resp. Br. at 7. Due to a 1987 fire at the landfill, ESG Watts further argues it was unable to defend itself against a 1986 allegation. Resp. Br. at 7. Further, ESG Watts asserts that the doctrine of *laches* is applicable with regard to the false Discharge Monitoring Reports (DMRs). Resp. Br. at 8. ESG Watts states that even though the landfill submitted monthly DMRs since 1986, complainant waited until February 1994 to determine that the DMRs were improperly completed. Resp. Br. at 8.

Complainant asserts that *laches* is not applicable in enforcement cases brought before the Board pursuant to the Act. Comp. Reply Br. at 3. Complainant argues that even if *laches* were applicable, ESG Watts has failed to prove the level of prejudice which would justify the imposition of the *laches* doctrine. Complainant argues that as soon as the Agency became aware of improperly submitted DMRs, the Agency pursued enforcement of the violations. Reply Br. at 4-5.

Laches is an equitable doctrine which bars relief where a defendant has been misled or prejudiced because of a plaintiff's delay in asserting a right. City of Rochelle v. Suski, 206 Ill. App. 3d 497, 501, 564 N.E.2d 933, 936 (2nd Dist. 1990). Although application of *laches* to public bodies is disfavored, it has nevertheless been clear at least since the Illinois Supreme Court's opinion in Hickey v. Illinois Central Railroad Co., 35 Ill. 2d 427, 220 N.E.2d 415 (1966) that the doctrine can apply to governmental bodies under "compelling circumstances." See also Van Milligan v. Board of Fire & Police Commissioners, 158 Ill. 2d 84, 630 N.E.2d 830 (1994); People v. Bigelow Group, Inc. (January 8, 1998), PCB 97-217, slip op. at 1-2. There are two principal elements of *laches*: (1) lack of due diligence by the party asserting the

claim, and (2) prejudice to the opposing party. Van Milligan, 158 Ill. 2d at 89, 630 N.E.2d at 833.

The Board believes that the doctrine of *laches* does not apply to the instant matter. ESG Watts has not shown lack of due diligence on the Agency's part. Further ESG Watts has not shown any prejudice. With regard to the 1986 water allegations, the Board barred such evidence on the basis of *res judicata* (see discussion above). With regard to the inaccurate DMRs, the Agency diligently pursued this violation upon its discovery of the circumstances. As such, the Board believes that there are no "compelling circumstances" which would show that *laches* should be applied in this matter.

FINDINGS OF FACT

ESG Watts, Inc., an Iowa corporation, is a subsidiary of Watts Trucking Services. Tr. at 522. ESG Watts owns and operates three landfills in Illinois: the Taylor Ridge landfill (previously known as the Andalusia Watts landfill, see Tr. at 20), located in Rock Island County, Illinois, which is at issue in this proceeding; the Sangamon Valley landfill, located in Sangamon County, Illinois; and the Viola landfill, located in Viola, Illinois. Tr. at 522. The Taylor Ridge landfill is presently still in operation and accepting waste in accordance with an operating permit (issued by the Agency in 1972) and several supplemental permits (issued subsequent to the original operating permit). The Sangamon Valley landfill is not currently accepting any waste and the Viola landfill is closed. Tr. at 522.

Taylor Ridge Landfill and Surrounding Areas

The Taylor Ridge landfill occupies 56.5 acres near Taylor Ridge, Rock Island County, Illinois. The landfill serves primarily the Rock Island area and covers an area of approximately 60 acres. In 1972, the Agency issued to ESG Watts a permit (permit number 1972-72-DE/OP) for the development and operation of the landfill. Through the initial permit and supplemental permits issued by the Agency, the Agency authorized ESG Watts to conduct waste disposal and sanitary landfill operations in the State of Illinois. Current permits (as entered into evidence by complainant) held by ESG Watts regarding this landfill include: (1) NPDES permit issued on August 21, 1986, and renewed in 1996 (NPDES Permit No. IL0065307) (see Comp. Exh. 6); (2) supplemental permit (Supplemental Permit No. 1993-167-SP), issued on August 27, 1993, regarding closure and post-closure plans as well as cost estimates, and other special conditions (see Comp. Exh. 65); (3) supplemental permit (Supplemental Permit No. 1995-374-SP), issued on January 9, 1996, which approved the biennial revision of closure and post-closure care plan for the facility (see Comp. Exh. 56),[7] and (4) supplemental permit (Supplemental Permit No. 1996-087-SP), issued on June 13, 1996, which allowed the installation and operation of the active gas management at the facility. Comp. Exh. 2.

[7] This permit is currently on appeal to the Board as ESG Watts, Inc. v. Illinois Environmental Protection Agency, (PCB 96-181).

The Taylor Ridge landfill filed its capacity certification on January 15, 1996. The operator of the landfill expects that there are 1,782,000 cubic yards remaining in the permitted capacity of the landfill and that it will close in the year 2000. Tr. at 30; Comp. Exh. 1 at 2-3. The Taylor Ridge landfill is one of three landfills in Rock Island County which pays a solid waste fee that funds the Rock Island County Waste Management Agency. Tr. at 514. Mr. Mehall, a solid waste coordinator at the Rock Island County Waste Management Agency, stated that if the Taylor Ridge landfill closed, his agency would "only suffer a slight decrease, if any" in loss of tipping fees from the Taylor Ridge landfill. Tr. at 520.

Several neighbors who own land around the Taylor Ridge landfill testified at the hearing regarding the problems they have experienced with the landfill. Their testimony is summarized at relevant portions of this section. Mr. Whitley owns 43 acres in two separate parcels which are adjacent to each other.[8] Tr. at 210. The first parcel is adjacent to the landfill on the north border of the landfill. Twenty acres of the second parcel are adjacent to the landfill on the west border of the landfill. Tr. at 210. Mr. Whitley owns a large pond on his own property and part of a small pond (also referred to as the retention pond) which is on his property and on the ESG Watts property. Tr. at 90-91. The large pond is a man-made pond about 400 feet long and 100 feet wide, and runs from north to south. Tr. at 211. The big pond has embankments; a small trailer is located next to the pond and a fishing dock is next to the trailer which extends into the pond. Tr. at 196. The large pond is situated to the north of the landfill. Tr. at 216. On the west side of the pond, the ground tends to slope off to the west and drain away. Tr. at 197. The large pond is between 100 to 120 feet from the property line. Tr. at 218. Various small-sized fish inhabit Mr. Whitley's large pond. Tr. at 196. There is a small watershed feeding the pond on the Whitley property. Tr. at 197. The small pond acts as a retention pond for silt or soil accumulations from the landfill. Tr. at 179, 221. The small pond was created in 1989 as a berm to cut off water that was entering the large Whitley pond. Tr. at 657.

Another neighbor, Mr. Martens, lives to the north of the landfill. He testified at hearing as to the odors, excess litter, and muddy highway from the landfill trucks. Tr. at 329. Mr. Siebke owns property which abuts the landfill on the northeast corner. Tr. at 353, 423. A drainage ditch, or creek (known as outfall 001 at the landfill) is on the property of Mr. Siebke. Tr. at 359, 366. Ms. Schultz, another neighbor who testified at hearing, lives about a half a mile from the landfill and gave testimony with regard to the odor she and her family smelled from the landfill. Tr. at 374, 376.

History of Non-Compliance

ESG Watts, and its operation of the Taylor Ridge, Sangamon Valley, and Viola landfills, has been the subject of myriad Board and court decisions in recent years. Indeed, in

[8] On April 26, 1984, Mr. Watts sued Mr. Whitley for slander and libel. The lawsuit was dismissed in 1991. Tr. at 283, 289. Mr. Whitley then brought a property suit against Mr. Watts. Tr. at 292. A mutual release was signed by both sides on April 10, 1991, which fully resolved both lawsuits. Tr. at 293. While ESG Watts argues that this history of conflict impacts the credibility of Mr. Whitley's testimony, the Board disagrees.

a recent Board decision regarding this landfill, the Board upheld the Agency's denial of five waste stream permits, based upon the operator's history of repeated violations of the Act, as allowed by Section 39(i) of the Act. 415 ILCS 5/39(i) (1996). See ESG Watts, Inc. v. Illinois Environmental Protection Agency (March 21, 1996), PCB 94-243 *et al*. In denying the permits, the Agency took into consideration 19 administrative citations, as well as a circuit court adjudication, involving ESG Watts' operations of Taylor Ridge or its other Illinois landfills. The Board's determination was affirmed by the Illinois Appellate Court, Third District. See ESG Watts, Inc. v. Pollution Control Board, 286 Ill. App.3d 325, 676 N.E.2d 299 (3rd Dist. 1997).

The 19 administrative citations issued by the Agency to ESG Watts prior to the above-referenced matter, and referenced therein, include: AC 86-10 (January 22, 1987), AC 87-123 (April 7, 1988), AC 88-17 (May 5, 1988), AC 88-25 (May 5, 1988), AC 88-45 (June 30, 1988), AC 88-49 (June 30, 1988), AC 88-50 (September 8, 1988), AC 88-112 (January 19, 1989), AC 89-38 (April 6, 1989), AC 89-131 (July 30, 1990), AC 89-255 (January 11, 1990), AC 89-278 (January 25, 1990), AC 89-286 (January 25, 1990), AC 90-26 (August 8, 1991), AC 90-36 (June 20, 1991), AC 94-11 (April 21, 1994), AC 94-12 (May 5, 1994), AC 94-13 (May 5, 1994), and AC 94-15 (May 5, 1994). The Agency does not believe that administrative citations have been an effective tool in achieving compliance at the Taylor Ridge landfill. Tr. at 73.

In addition to receiving these administrative citations, ESG Watts has been a defendant in at least three circuit court proceedings where the Illinois Attorney General has alleged, and proven, violations of the Act. On September 11, 1992, Judge Cadagin entered a preliminary injunction order against the Taylor Ridge landfill in People v. Watts Trucking Service, Inc., No. 92-CH-23 (Cir. Ct. Sangamon Co.), that required ESG Watts to: (1) implement adequate measures to monitor and control leachate; (2) establish an appropriate trust fund balance for financial assurance; and (3) make quarterly payments of the solid waste management fees and submit required reports in a timely fashion. Tr. at 313-14. See Comp. Exh. 29 at 2.

Another judgment order was issued on February 2, 1994, by the Sangamon County Circuit Court, this one involving ESG Watts' operation of the Sangamon Valley landfill, People v. Watts Trucking Service, Inc., No. 91-CH-242 (Cir. Ct. Sangamon Co.). In that case, Judge Leo Zappa found ESG Watts in violation of various provisions of the Act for three years and ordered ESG Watts to come into full compliance with Agency permits. See Comp. Exh. 62. Additionally, the court order imposed penalties in the amount of $350,000, and awarded attorney fees and expert witness costs in the amount of $30,940. Comp. Exh. 62. On February 23, 1995, Judge Zappa found ESG Watts to be in direct civil contempt for having substantially failed and willfully refused to comply with the February 2, 1994, judgment order. The court ordered sanctions, attorney fees, and corrective actions under a specified timetable. See Comp. Exh. 63. Finally, on June 6, 1996, Judge Zappa entered a supplemental contempt order which found ESG Watts had not complied with the February 23, 1995, contempt order and which ordered ESG Watts to institute corrective actions, pay sanctions and attorney fees. See Comp. Exh. 64. The supplemental contempt order signed by Judge Zappa stated: "incarceration is a drastic measure but will be seriously considered as a means to enforce

compliance if said deadlines are not met or good reasons are not shown for failure to comply." Comp. Exh. 64 at 4-5.

Later, on December 15, 1995, the Sangamon County Circuit Court adjudicated ESG Watts in violation of the Act and corresponding regulations, this time for violations pertaining to its operation of the Viola landfill. See People v. Watts Trucking Service, Inc., No. 92-CH-35 (Circuit Court Sangamon County). Watts was ordered to pay the balance of its financial assurance owed in the amount of $214,382. Resp. to Previous Violations at 7.

Additionally, the Board has found ESG Watts or its parent company, Watts Trucking Service, Inc., in violation of the Act in each of the following State enforcement cases: IEPA v. Watts Trucking Service, Inc. (October 14, 1975), PCB 74-131; People and IEPA v. Watts Trucking Service, Inc. (July 12, 1979), PCB 77-162; IEPA v. Joyce E. Frye & Watts Trucking Service, Inc. (May 24, 1979), PCB 78-38; IEPA v. Watts Trucking Service, Inc., *et al*. (July 9, 1981), PCB 81-7; and People v. ESG Watts (May 4, 1995), PCB 94-127. In People v. ESG Watts, Inc. (May 4, 1995), PCB 94-127, the Board found ESG Watts' operation of the Taylor Ridge landfill in violation of the Act based upon a variety of proven charges, specifically for improperly conducting a waste disposal operation, for failure to submit reports, for failure to pay fees, for failure to submit cost estimates, for failure to follow closure requirements, and for failure to submit a significant modification permit. The Board assessed a penalty of $60,000 against ESG Watts and, in finding that the violations were knowing and willful, ordered it to pay $4,980 in attorney fees to the Attorney General's Office pursuant to Section 42(f) of the Act (415 ILCS 5/42(f) (1994)). We declined at that time, however, to revoke ESG Watts' permits to operate Taylor Ridge landfill. See Watts (May 4, 1995), PCB 94-127, slip op. at 16. This case was affirmed on appeal to the Illinois Appellate Court in ESG Watts, Inc. v. Pollution Control Board, 282 Ill. App. 3d 43, 668 N.E.2d 1015 (4th Dist. 1996).

Finally, in addition to the instant matter, and the past adjudications referenced above, the Board has a variety of ESG Watts cases on our docket pending resolution. They are: AC 94-28, AC 94-29, AC 94-48, AC 94-49, AC 94-50, AC 94-51, AC 94-52, AC 94-58, AC 94-59, AC 94-60, AC 94-61, AC 94-81, AC 94-82, AC 94-90, AC 94-91, AC 94-95, AC 95-8, AC 95-18, AC 95-21, AC 95-28, AC 95-29; AC 98-4; PCB 94-176, PCB 95-109, PCB 95-110, PCB 96-181, PCB 96-233, PCB 96-237, PCB 97-210, PCB 98-2, and PCB 98-38. Of these pending matters, 22 are ESG Watts' appeals from administrative citations issued by the Agency, two are state-initiated enforcement actions, six are ESG Watts' appeals of the Agency's decisions to deny permits to ESG Watts, and one is a landfill siting review. Some of the permit denials were based, in part, upon the operator's prior history of violations. See ESG Watts, Inc. v. IEPA, PCB 95-110, PCB 96-181, PCB 97-210, and PCB 98-38.

Facts Pertinent to Alleged Violations

Multiple inspections were made of the Taylor Ridge landfill over the course of many years. The Agency testified to many violations as a result of inspection reports compiled by its

inspectors.[9] The Agency made regular, routine inspections of the landfill to determine and monitor compliance at the landfill; additionally, the Agency made inspections prompted by various neighbors' requests. At a minimum, the Agency made six inspections of the landfill per year. Tr. at 300. During a typical inspection made by Mr. Mehalic, an environmental protection specialist with the Agency, Mr. Mehalic would seek out the previous day's working area to see if it had been adequately covered with soil or synthetic fabric. Tr. at 296, 303-04. As Mr. Mehalic would observe violations, he would note such violations on a checklist which he carried with him during each inspection. Tr. at 304-05. Mr. Mehalic would usually walk around the site with Mr. Chenoweth, the Taylor Ridge landfill supervisor. Tr. at 304, 600. On almost every inspection performed by Mr. Mehalic, Mr. Chenoweth would accompany Mr. Mehalic. Tr. at 613. Mr. Chenoweth stated that he would perform the landfill's own site inspections not less than three times a week and up to six times a week. Tr. at 604-05; see Resp. Exh. 52.

Permit Violations and Financial Assurance/Cost Estimates

Pursuant to financial assurance regulations, operators of pollution control facilities are required to provide financial guaranty that they are able to clean up the facility at the end of its life. See Part 807.603 (35 Ill. Adm. Code 807.603); Tr. at 475, 478. The money is used to close the landfill and provide for monitoring and maintenance after closure. See Part 807; Tr. at 478. There are six financial assurance mechanisms a landfill or solid waste facility can use to provide financial assurance: payment bond, performance bond, closure insurance, letter of credit, self-insurance, and trust funds. 35 Ill. Adm. Code 807.640; Tr. at 483-84. Mr. Taylor, a financial assurance analyst for the Agency, testified that ESG Watts has used the trust funds mechanism for any financial assurance which it has provided for the facility. Tr. at 484.

Cost estimates reflect the cost of closure of the facility and determine the amount of money a landfill is required to have in its financial assurance trust fund. The Taylor Ridge landfill's permits reflect the Board's requirements at Part 807 (35 Ill. Adm. Code 807) that cost estimates be updated biannually. See Comp. Exh. 65 (Supplemental Permit No. 1993-167-SP) at 1, 2; Comp. Exh. 56 (Supplemental Permit No. 1995-374-SP) at 1. In accordance with 35 Ill. Adm. Code 807.603, the operator is to provide additional financial assurances to equal the Agency's cost estimate within 90 days of the issuance of each cost estimate/financial assurance permit. Tr. at 489. Initially, Special Condition 8 of Supplemental Permit No. 1991-292-SP, issued December 24, 1991, provided that "[t]he operator shall file revised cost estimates for closure and post-closure care at least once every two years . . . [t]he revised cost estimates are due on or before November 28, 1992." Comp. at 6. Pursuant to that supplemental permit, ESG Watts filed its cost estimates for closure and post-closure on or about April 30, 1993. Resp. to New Violations at 1.

[9] The Board notes that we did not consider facts pertinent to alleged water violations which occurred before the September 11, 1992, order issued by Judge Cadagin in No. 92-CH-23. See *supra* at 6.

Supplemental Permit No. 1993-167-SP, issued on August 27, 1993, authorized a current cost estimate of $324,577.45 and required a biennial revision of the current cost estimate by no later than November 28, 1994. Comp. Exh. 59 at 1. While ESG Watts submitted revised cost estimates within a sig mod application filed with the Agency on September 15, 1994, such application was denied by the Agency on February 16, 1995. Tr. at 35, 548, 924. The next approved current cost estimate, approved over 13 months later on January 9, 1996, was included in Supplemental Permit No. 1995-374-SP at the amount of $559,463.59. Comp. Exh. 59 at 1. Supplemental Permit No. 1996-087-SP, issued on June 13, 1996, required ESG Watts to increase financial assurance for this facility to $1,299,464 by September 11, 1996. Comp. Exh. 59 at 1. In accordance with 35 Ill. Adm. Code 807.623, ESG Watts was required to bring its financial assurance up to this amount by September 13, 1996, 90 days after the issuance of the June 13, 1996, supplemental permit. As of the date of hearing, ESG Watts had not updated its financial assurance amount in accordance with permit requirements; ESG Watts had just over $435,000 in Taylor Ridge's trust fund for closure of the facility. Tr. at 489. The trust fund remains underfunded by about $864,464.

ESG Watts' other two Illinois landfills are also underfunded with respect to their financial insurance obligations. Tr. at 492. Mr. Taylor prepared three memoranda (Comp. Exh. 57, 58, 59) which detail the requirements for the ESG Watts' financial assurance obligations for all three of the ESG Watts' landfills. Tr. at 489-90. The total deficiency for the three facilities on September 19, 1996, was $1,841,971.56. Comp. Exh. 58 at 2; Tr. at 493. If ESG Watts does not pay for the closure of the landfill, eventually the cost will be borne by Illinois taxpayers. Tr. at 492. The Agency estimates that ESG Watts has benefited by about $55,000 for its failure to timely supply the Taylor Ridge trust fund with the appropriate financial assurance obligations from November 1994 to October 1996, the date of the hearing.[10] The Board notes that complainant entered into evidence the 1994 and 1995 corporate U.S. income tax returns of ESG Watts (see Comp. Exh. 66, 67). Such items show ESG Watts' ability to contribute to financial assurance since Watts Trucking Services, Inc. and subsidiaries had $951,591 of net income remaining in 1995 and $3,460,771 of net income remaining in 1994. Also, as listed on the 1995 U.S. income tax return, ESG Watts has an outstanding loan to its sole stockholder, James Watts, in the amount of $1,012,014. Tr. at 540-43; Comp. Exh. 66, 67.

Mr. Eilers testified on the date of hearing that ESG Watts had not obtained financial assurance, but that ESG Watts had taken steps to obtain the financial assurance. Tr. at 528. Mr. Eilers stated that the landfill had begun to have discussions in early 1995 with insurance brokers in order to have an insurance company provide the financial assurance. Tr. at 529-531, 538. Within the 30 days prior to hearing, Eilers stated that one of the insurance companies, the Lawly Group, had submitted a formal application to Zurich International

[10] By assuming the "cost of capital" for ESG Watts was 15%, and Watts' trust fund earnings were 3%, the Agency calculates that the value of the savings is $54,279. See Comp. Exh. 59 at 1-2; see also Tr. at 495-97. (The "cost of capital" is the interest rate which Watts would have to pay to borrow the money for financial assurance. It is an approximation to show a rough value of the savings.) Tr. at 497.

Insurance Company, to obtain an insurance policy for the amount of financial assurance required by the landfill. Tr. at 531-32. Additionally, because RTC has funded the gas management system at the landfill (see discussion *infra* at 26), RTC has also agreed to fund the additional financial assurance required as a result of the gas management system. Tr. at 528-529.

Mr. Child testified that the Agency is "gravely concerned" about the underfunding of the landfill's financial assurance commitment. Tr. at 16, 41. Mr. Child stated that a trust is important for fixing erosion control and leachate seeps during closure. Tr. at 41. Mr. Child further testified that if the landfill lives its full design life, the closure costs would go up due to the increased volume of refuse which causes an increased amount of leachate. Tr. at 42-43. Costs would be higher due to the greater amount of daily cover and more final cover; he stated that additional height on side slopes would also need to be maintained. Tr. at 43.

Significant Modification Permit

Landfill design and technology have evolved greatly over the last 25 years, and with it so have environmental regulations pertaining to landfill design and operation. Mr. Child testified at hearing that while there were more than 200 operational landfills in Illinois twenty years ago, "today the number is 60 and declining." Tr. at 21.

Board regulations, consistent with later adopted federal Resource Conservation Recovery Act Subtitle D regulations, establish a system by which landfills in Illinois have been forced to significantly upgrade their design and operations, or go out of business. Landfill owners/operators who decided to close their landfills by 1992, were allowed to operate as built without further upgrade. Landfill owners/operators who desired that their landfills stay open from 1992 through 1997, were required to submit what is known as a sig mod permit to the Agency for approval. Landfill owners/operators who desired to keep their landfills operational beyond 1997 were required to obtain a sig mod permit which would insure that the facility would fully upgrade and put in all newly required control measures, including groundwater monitoring and modeling. Tr. at 30-31.

ESG Watts' sig mod application for the Taylor Ridge landfill was due, pursuant to 35 Ill. Adm. Code 814.104, 814.105(b) and Agency deadline, on September 1, 1993. Comp. at 8. It was not filed until September 15, 1994.[11] The application was not determined to be "administratively complete" until December 16, 1994. Tr. at 548. Known by Agency number 1994-436, the permit application was denied by the Agency on February 16, 1995. Tr. at 35, 548. In a detailed seven-page denial letter, the Agency cited various technical

[11] As earlier explained, the untimeliness of this submittal, along with the other alleged enforcement case violations, was the subject of a previous matter, People v. ESG Watts (May 4, 1995), PCB 94-127, *aff'd*, 282 Ill. App. 3d 43, 668 N.E.2d 1015 (4th Dist. 1996), which assessed $60,000 in penalties against ESG Watts.

reasons for denial. Pursuant to Section 39(i) of the Act (415 ILCS 5/39(i) (1994)), the Agency also based its denial on the history of ESG Watts' violations of the Act.[12]

Meetings were subsequently held between representatives of the Agency and ESG Watts concerning ESG Watts' sig mod application where it was agreed that ESG Watts would resubmit the application. Tr. at 553, 555. A second sig mod application was submitted in the fall of 1996, approximately the same period of time that hearings were on-going in this matter. Tr. at 61-62; see Resp. Exh. 1. Mr. Keith testified that he was hired to assist in preparation of an application for the sig mod permit for the Taylor Ridge landfill site. Tr. at 545-47. Mr. Keith stated that part of the 14-month delay to resubmit information responsive to the denial points to the Agency was due in part to ESG Watts' failure to pay CH2MHill for the work it was performing for ESG Watts. Tr. at 565, 567-68. ESG Watts' additional reasons for the delay included the fact that leachate samples needed to be taken from the landfill and that there was a need to collect more field data including soil borings and probing for landfill gas, among other things. Tr. at 567-68.[13]

Exposed Refuse/Cover

The Taylor Ridge landfill has had a continuing problem with exposed refuse and lack of adequate cover. At the end of every work day, Mr. Chenoweth would attempt to ensure that adequate cover was in place over any open refuse in the active work space. Tr. at 602. However, while Mr. Chenoweth testified that he could not recall a time when there was no adequate cover, the evidence showed otherwise.[14] Tr. at 602.

Mr. Mehalic began recording uncovered refuse violations as early as December 3, 1992. During an inspection on that day, Mr. Mehalic observed uncovered refuse from the previous operating day covering the surface area of about 150 feet by 25 feet. See Comp. Exh. 26, photos 1-7; Tr. at 305-06. Mr. Mehalic had specifically asked to see the area of the previous day's operation and Mr. Chenoweth pointed to the area of uncovered refuse. Tr. at 307.

Later, in 1993, Mr. Mehalic observed exposed refuse in the southern portion of the current waste placement area during an inspection on April 14, 1993. Tr. at 310; Comp. Exh. 28, photos 23, 24. Less than two months later, on June 8, 1993, Mr. Mehalic again observed exposed refuse, this time on the southern portion of the landfill, as well as a 40 by 50 square

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[12] That denial is currently on appeal before the Board in docket PCB 95-110. At the request of the parties, the Board has stayed this permit appeal pending resolution of the instant matter.

[13] The Board takes administrative notice that this second sig mod application was formally denied by the Agency on August 5, 1997, and is also currently on appeal before the Board, in ESG Watts, Inc. v. IEPA, PCB 98-38. The denial letter is based upon technical issues, as well as an application of Section 39(i) of the Act. Again at the request of the parties, this matter has been stayed.

[14] Mr. Chenoweth stated that at least on one occasion, during bad weather, he would not let equipment reach exposed refuse because of the potential danger imposed. Tr. at 614. See also Comp. Exh. 40. Weather could inhibit the landfill personnel from reaching exposed refuse on various occasions. Tr. at 638.

foot area on the eastern slope of the landfill. Tr. at 315. A few weeks later, on June 30, 1993, Mr. Mehalic observed exposed waste again on the same southern portion of the landfill where he had observed uncovered waste on April 14 and June 8, 1993. Tr. at 318-19; Comp. Exh. 31, photos 2-4. A month later, on July 28, 1993, Mr. Mehalic again observed exposed refuse on the southern slope; however, the landfill had made an attempt to cover such area with synthetic fabric. Tr. at 381.

On his inspections the next year, Mr. Mehalic continued to observe exposed trash. Specifically, during an inspection on October 6, 1994, Mr. Mehalic observed "portions of trash starting to poke out" of the eastern slope of the landfill, due to an inadequate amount of cover. Tr. at 394-95. Mr. Mehalic pointed out the problem to the landfill personnel. Tr. at 395. By the next inspection on December 14, 1994, ESG Watts had made an attempt to address the uncovered refuse. However, Mr. Mehalic observed that an inadequate amount of cover remained on that portion of the landfill. Tr. at 396-97.

Mr. Mehalic's observations of exposed refuse and inadequate cover continued on into 1995 and 1996. On May 18, 1995, Mr. Mehalic observed uncovered refuse in an area covering approximately 15 by 30 square feet. Tr. at 402; see Comp. Exh. 43, photos 1-4. On February 14, 1996, Mr. Mehalic observed uncovered refuse south of the previous day's working area in the center of the landfill. Tr. at 416. It was not covered with daily cover as was required by the permit. Tr. at 416. See Comp. Exh. 48, photos 7-27. On that same day, Mr. Mehalic also observed litter scattered throughout the landfill by the previous day's active area. Tr. at 417. Three months later, on May 23, 1996, Mr. Mehalic observed tires protruding from some cover material on the northern portion of the landfill. Tr. at 421.

In addition to Mr. Mehalic's observations concerning inadequate cover, hearing testimony offered by Mr. Brao addressed the issue of final cover. Mr. Brao, president of Noble Earth Corporation and an environmental consultant, was hired by ESG Watts to determine the adequacy and density of cover. While he began discussions with ESG Watts concerning this job in the spring of 1996, he did not actually begin work until a week prior to the October hearings in this matter. During that week, he performed over 150 soil borings on the landfill to determine the adequacy and density of cover. See Resp. Exh. 3, 4; Tr. at 582-83, 588-89. While Mr. Brao believed that there was sufficient cover thickness in place over much of the area, he admitted that there was, at least, an area of approximately one-half acre which clearly shows insufficient cover. Tr. at 599.

Leachate

Leachate has long posed a problem at the Taylor Ridge landfill. In 1992, the Sangamon County Circuit Court issued a preliminary injunction against ESG Watts prohibiting the Taylor Ridge landfill from, among other things, engaging in further leachate violations. Tr. at 265. The preliminary injunction also required that the landfill implement adequate measures to monitor and control leachate. Tr. at 313; see Comp. Exh. 29. ESG Watts has taken some corrective measures to control the leachate pursuant to the circuit court's

injunction; however, ESG Watts has not implemented adequate measures to control leachate in the long term. Tr. at 266-67, 314.

Leachate is a liquid that has been in direct contact with a solid waste. See Ill. Adm. Code 807.104; Tr. at 307-08. It is formed when solid refuse mixes with a liquid and it accumulates within the landfill. Tr. at 311. If refuse is not properly covered, precipitation (liquid) can seep into the landfill, come in contact with refuse, and form leachate. Tr. at 311. As Mr. Mehalic described, "leachate seeks out areas of least resistance and more or less pops out" of the landfill. Tr. at 311. Short-term steps to eliminate leachate include maintaining adequate cover, excavating the area and plugging it with a clay cap, and then compacting the area. Long-term remediation would include extracting the leachate from the landfill. Tr. at 312. Mr. Mehalic believes that long-term leachate remediation is warranted for Taylor Ridge landfill. Tr. at 312, 433.

In the site inspection reports compiled by Mr. Chenoweth, leachate was continuously reported as a problem of concern. Tr. at 430; Comp. Exh. 52. Mr. Chenoweth testified that if he discovered leachate during his inspections, he would flag the leachate seeps. Tr. at 606. Typically, the landfill personnel would then cap the flagged area with clay. Tr. at 607.

Mr. Mehalic's various inspections of Taylor Ridge confirmed that, while the landfill had indeed taken various steps to control leachate, the measures have not successfully abated leachate seeps. On December 3, 1992, Mr. Mehalic observed that landfill personnel had repaired various leachate seeps on the southern portion of the landfill. Tr. at 307-08; see Comp. Exh. 26, photos 8, 11. However, during the next six months, Mr. Mehalic observed leachate seeps during two inspections: on April 14, 1993, (Tr. at 310, Comp. Exh. 28, photos 16-20); and again on June 8, 1993, (Tr. at 315). Further, on July 28, 1993, Mr. Mehalic observed two brownish, oily leachate seeps at the northwestern bottom portion of the waste placement area. Tr. at 381-82; see Comp. Exh. 32, photos 6, 7, 21, 22. The following year, on April 13, 1994, Mr. Mehalic viewed approximately four leachate seeps (a brownish-orange liquid) along the southwestern portion of the landfill and southeastern portion of the landfill. Tr. at 384-85; Comp. Exh. 37, photos 8, 19, 20, 21. Leachate was also a problem on May 25, 1994. Tr. at 389; see Exhibit 38, photos 10, 16, 17, 18.

On August 3, 1994, Mr. Mehalic observed that the landfill had remediated leachate seeps in the northern portion of the landfill. Tr. at 392. On October 6, 1994, however, Mr. Mehalic observed leachate seeps while inspecting the southeastern portion of the landfill slope. Tr. at 393. While Mr. Mehalic again observed the landfill's attempt at remediation of leachate seeps on his December 14, 1994, inspection (Tr. at 396; Comp. Exh. 41), by February 9, 1995, leachate was bubbling out of the ground and appeared as a brownish liquid on the southeastern and southwestern corners of the landfill. Tr. at 401; Comp. Exh. 42, photo 12. Mr. Mehalic observed another ten leachate seeps on May 18, 1995 (Tr. at 403; Comp. Exh. 43, photos 15-27) and, during an inspection on July 12, 1995, he observed leachate at the southern slope of the landfill. Tr. at 408; Comp. Exh. 44, photos 17, 18. Also, on August 23, 1995, Mr. Mehalic observed further leachate seeps during an inspection (Tr. at 410) and

on July 18, 1996, Mr. Mehalic observed leachate at the southwestern corner of the landfill. Tr. at 422; see Comp. Exh. 50, photos 7, 9.

Taylor Ridge landfill neighbor, Mr. Whitley, has observed leachate flowing from the landfill on various occasions since 1986. He testified to these observations during the Sangamon County court case and again at hearing in the instant matter. He has observed the following leachate seeps since the court case: leachate flowing from landfill into ponding area on April 27, 1993, (see Comp. Exh. 19, photos 3-7); and leachate flows on May 23, 1993, (see Comp. Exh. 23).

Runoff of Silt and Refuse/Erosion

In addition to leachate, the landfill is also beset with the problem of runoff of soil, silt, and refuse into neighboring properties. This runoff has caused significant erosion and has contributed to the landfill's problems with leachate and odor. Tr. at 388. An estimated 31 tons of soil, per acre per year, leave the facility through runoff. Tr. at 172. This estimate was provided by Mr. Kammueller who based his estimation on a document entitled, "Estimating Your Soil Erosion Losses With the Universal Soil Loss Equation (USLE)," which is a circular prepared by Robert D. Walker and Robert A. Pope of the Cooperative Extension Service, College of Agriculture, University of Illinois at Champaign-Urbana. See Comp. Exh. 61.

While problems with runoff have historically plagued the landfill, more recent examples are detailed in this case. Mr. Kammueller observed and documented runoff problems on an inspection he made of the landfill on February 14, 1994. Tr. at 115-128; Comp. Exh. 7. At that time, he indicated to Mr. Jones various steps that the landfill personnel should do to correct these problems. Specifically, Mr. Kammueller and Mr. Jones discussed corrective actions to control erosion, provide cover, and divert stormwater. Tr. at 128. Since the inspection in February 1994, ESG Watts has taken various steps to control erosion and runoff from the landfill. Landfill personnel have built a diversion structure to divert runoff away from the Whitley ponds (Tr. at 131), have placed bales of straw in a ditch upstream of outfall 001 (Tr. at 131), and have planted some vegetative cover on the inactive cap (Tr. at 131-32).

These attempts at control have not been successful, however, as runoff and erosion problems continued to be observed and documented by the Agency. Tr. at 131-33. For example, on February 9, 1996, Mr. Kammueller returned to the Taylor Ridge landfill and observed that ESG Watts was attempting to address the runoff problems by diverting the flow of the runoff and placing straw bales in the drainage ditch. Tr. at 168. He did not consider that the corrective action he advised the landfill to conduct in February 1994 had occurred by February 1996, however. Tr. at 170.

Mr. Mehalic also testified to various observations he made concerning runoff during his inspections of Taylor Ridge. In addition to runoff of silt and soil, Mr. Mehalic personally observed various types of refuse that had been carried by runoff from the landfill area and

ended in the big pond on the neighboring property. Tr. at 409. On June 30, 1993, Mr. Mehalic observed refuse in erosion rills during an inspection. Tr. at 319; see Comp. Exh. 31, photo 11. Exposed refuse was washing down the southern slope of the landfill, causing erosion. Tr. at 320.

The problems continued to be observed by Mr. Mehalic on his 1994, 1995, and 1996 inspections. On April 13, 1994, Mr. Mehalic observed "the beginnings of an erosional rill" forming at the northern portion of the landfill. Tr. at 388; Comp. Exh. 37, photos 14, 15. Four months later, on August 3, 1994, he observed erosion channels in that northern portion of the landfill. Tr. at 392; see Exh. 39, photos 9, 18. On October 6, 1994, Mr. Mehalic again observed erosional rills on the northern slope of the landfill and also on the southwestern slope of the landfill. Tr. at 393; Comp. Exh. 40, photos 12, 17, 18. On May 18, 1995, Mr. Mehalic observed exposed waste in erosional rills on the western portion of the landfill. Tr. at 404. During an inspection on January 23, 1996, Mr. Mehalic observed erosion problems on the southern slope of the landfill. Tr. at 416; Comp. Exh. 47, photos 13, 14. Mr. Mehalic testified that long-term remedies for erosion still need to be addressed by the landfill (Tr. at 433), and that the side slopes of the landfill need to be restructured to accommodate runoff and to deter any surface water runoff from the adjoining retention pond. Tr. at 433.

Much testimony was adduced at hearing concerning the effect the landfill runoff has had on neighboring properties. Mr. Mehalic himself conducted an off-site inspection of the neighboring Siebke property on July 18, 1996, and observed litter, which appeared to be from the landfill, sitting in a ravine on the property. Tr. At 423. During Mr. Mehalic's last inspection before hearing, on September 12, 1996, he observed Siebke's property which abuts the landfill on the northeast corner (Tr. at 353, 423), and noticed that the landfill had constructed a clay side slope liner to restrict off-site movement of litter. Tr. at 427. At hearing, Mr. Mehalic testified that a berm or other above-grade structure might more effectively deter litter from running down into the ravine. Tr. at 427-28.

Mr. Siebke, testified at hearing regarding the significant problems he has experienced with runoff from the landfill. Tr. at 353, 423. A drainage ditch, or creek (known as outfall 001 at the landfill) located on the Siebke property has, over the years, gotten deeper and wider due to the large amounts of runoff originating from the landfill. Tr. at 359, 366. The excess runoff washes roots away from trees and has caused erosion to the area around the creek on the Siebke property. Tr. at 359. There are dead trees and vegetation around the area of the drainage ditch. Tr. at 360.

Mr. Siebke further testified about the runoff, and the debris it contained, from the landfill. Specifically, Mr. Siebke stated: "[w]e have found -- you name it. There [have been] tires, tampon applicators, surgical gloves, you know, tin cans. Anything that would go into a landfill, we have seen. Bottles." Tr. at 360-61. When refuse would wash into the ditch, Mr. Siebke would call the landfill to come and clean it. Mr. Siebke testified that the amount of trash in the drainage ditch has, at times, generated enough refuse to fill up 10 to 12 garbage bags during one cleanup. Tr. at 369. Regarding the landfill's efforts at cleaning up the washed-up debris, Mr. Siebke stated that landfill personnel were responsive ". . . as far as

coming down and cleaning up the debris after . . . it's created. But they don't try to solve the problem." Tr. at 368-69. Mr. Siebke testified that the problem has gotten worse within the present timeframe, compared to the past four or five years, because the operation of the landfill has changed, in that the landfill is actively filling in the northeast corner of the site. Tr. at 362.

Mr. Whitley also testified to the considerable problems he has had on his property as a result of runoff from the landfill, especially soil. Due to silt runoff from the landfill, Mr. Whitley has had to change the elevation of the dike in his pond, by raising the water ten feet. Tr. at 218. In 1982, the large pond had a depth somewhere between 14 and 16 feet, and at the time of the hearing in this matter, the pond measured nine feet, at the maximum, in its deepest point. Tr. at 219. The small retention pond also fills up with silt from the landfill from time to time. An inspection conducted by Mr. Mehalic on July 12, 1995, confirmed Mr. Whitley's testimony about silt entering the small pond. On that inspection, Mr. Mehalic observed that the small retention pond was heavily laden with silt, which originated from the landfill sloped area from the northern portion of the landfill. Tr. at 409.

Between 1990 and 1995, landfill personnel cleaned out the small pond about four times. Generally when they cleaned the pond, they piled the extracted material on the pond's banks. Tr. at 239-41. Eventually, the siltation would slide back into the small pond and the pond would need to be dredged again. Tr. at 241-42. Though silt fences and other measures were used to try to prevent the silt from entering the pond, such measures proved unsuccessful in the long term. Tr. at 243-259. The dredging of the pond and piling of the siltation has not been effective in preventing further runoff from the landfill onto Mr. Whitley's property. The siltation in the pond and the dredging which resulted from the accumulation of the siltation was photographed by Mr. Whitley. Several of these photographs were entered as exhibits during the complainant's case-in-chief. See Comp. Exh. 17, 18, 19, 20, 21.

Another landfill neighbor, Mr. Martens, testified that he and his family are bothered by excess litter and a muddy highway from the landfill trucks. Tr. at 329. Mr. Martens testified that, due to a muddy highway, he has experienced his automobile sliding off the road because of large chunks of mud originating from the landfill. Tr. at 336.

NPDES Permit/Water Pollution

On August 21, 1986, the Agency issued ESG Watts an NPDES permit (permit number IL0065307) to allow for the discharge of stormwater at Taylor Ridge landfill at two discharge points: outfall 001, a natural ravine on the north side of the landfill and on the Siebke property; and outfall 002, on the south side of the landfill. See Comp. Exh. 6; Tr. at 101, 103, 659; see also Comp. Exh. 3. Both of these outfalls empty into at least three unnamed tributaries of the Mississippi River. Tr. at 105-107. The NPDES permit requires certain effluent standards to be met by any discharge from the landfill and also requires the monitoring of such discharges. Tr. at 107. ESG Watts would remove ponded stormwater by pumping it to discharge points 001 and 002. Tr. at 658-59. As the landfill personnel excavated from the northwest to the northeast, they would dig down to a bottom elevation three to six months

ahead of the landfilling activities. After digging, the "ponded" areas would fill with precipitation and would need to be pumped out. Tr. at 659. The contents of the small retention pond was not considered ponded stormwater. Tr. at 661. As Mr. Jones testified, ESG Watts' interpretation of the NPDES permit was that only those discharges which they were actively pumping had to be monitored. Tr. at 879.

The monitoring obligation in the landfill's NPDES permit required that the landfill monitor the parameters in the discharge water and submit DMRs to the Agency. Tr. at 109. Evidence adduced at hearing clearly establishes that the landfill often filed inaccurate DMRs. The DMRs were inaccurate in that they showed no discharge (and accordingly, no monitoring for required parameters) at various times when there would naturally have been a discharge, and during times when landfill personnel pumped water through the outfall point. One example was Mr. Kammueller's February 14, 1994, inspection of the landfill. While there was clearly a discharge (which Mr. Kammueller observed, took a sample from, and tested (see Comp. Exh. 7)), the landfill reported "no discharge" on the relevant DMR for that month for both outfalls. See Comp. Exh. 8; Tr. at 110-111, 134-135. Albeit a small discharge at the time of Mr. Kammueller's visit, there was enough to test and, because snow was just beginning to melt, it was obvious to Kammueller that the water would flow faster quite soon. As Mr. Kammueller testified at hearing, "[w]hen I was there, I sampled discharges. And as the weather warmed that month, there, in my opinion, were bound to be additional discharges." Tr. at 135.

In his testimony, Mr. Jones admitted that he reported no discharge for the February 1994 DMR, but said he did so because he believed the discharge was too small to be a "monitorable discharge." Then, he admitted that this information was not entirely accurate stating, "I filled it out incorrectly." Tr. at 882. Mr. Jones also admitted that he never monitored outfall 002. Tr. at 879; see also Resp. to New Violations at 3. In not monitoring outfall 002, Mr. Jones stated, "[i]t was basically ignorance on my part. Looking at it, we should have been doing that." Tr. at 802. He contested his obligation to have monitored outfall 001. He believed that the landfill was only obligated to report and monitor a discharge when they were actively pumping from outfall 001 (Tr. at 879-881). Apparently, the landfill never reported a discharge from outfall 001 whenever water flowed naturally from a rain event. Testimony from ESG Watts landfill employee Mr. Grothus indicated that the landfill personnel would pump stormwater into outfall 001 "routinely" and "whenever we needed to." Tr. at 660-661, Tr. at 114.

After February 14, 1994, Mr. Kammueller visited the landfill several more times to check on the extent and quality of the water leaving the landfill. On August 7, 1995, Mr. Kammueller inspected the landfill pursuant to a complaint from Mr. Whitley concerning the quality of water in his ponds. Mr. Kammueller's investigation showed that the small pond was filled with sediment originating from landfill runoff and contained six inches of water at its deepest point. Water was discharging from the small pond into a stream going to the Whitley large pond. Tr. at 140-142; Comp. Exh. 9. On August 30, 1995, Mr. Kammueller again visited the landfill, this time to sample water that needed to be discharged from a large impoundment in the northeast corner of the landfill. At that time the sample met applicable

discharge limits of the NPDES permit, but Mr. Kammueller observed that the pumping had stopped and litter was evident. Tr. at 143-46; see Comp. Exh. 10. On September 5, 1995, Mr. Kammueller made a subsequent visit to inspect the progress since the August 30, 1995, inspection. Comp. Exh. 11. A sample of the discharge taken on that inspection revealed a high concentration of suspended solids and iron in violation of the NPDES permit limits (see table below). Tr. at 147. Subsequent DMRs for the month of August 1995 also showed a high concentration of suspended solids present in the discharge. Tr. at 149.

As a follow-up to previous inspections, Mr. Kammueller again inspected the facility on February 7, 1996, and found muddy, brown, turbid runoff at various points in the landfill which were later determined to be exceedences of the suspended solids and total iron NPDES permit requirements as shown below. Tr. at 154; Comp. Exh. 12. Two days later, on February 9, 1996, Kammueller inspected the site and found "millions of gallons a day easily" of runoff leaving the facility. Tr. at 157. The water sampled was muddy, brown, turbid and an oily sheen was present. Tr. at 159. The DMR submitted by ESG Watts for the month of February 1996 showed exceeding levels of solids and iron leaving the site in the stormwater runoff. See Comp. Exh. 8; Comp. Exh. 13.

The following tables show the NPDES permit requirements and also show when discharges were reported and analyzed. The samples show a higher-than-permitted concentration of the following parameters on the following dates at the stated sample points. The samples taken should be measured against the "daily average" requirements as listed in the NPDES permit. Also, note that manganese does not always exceed the limits.

NPDES PERMIT REQUIREMENTS (see Comp. Exh. 6)

SUSPENDED SOLIDS	TOTAL IRON	MANGANESE
12 mg/L daily average	2.0 daily average	1.0 daily average
24 mg/L daily maximum	4.0 daily maximum	2.0 daily maximum

DATE OF DISCHARGE	SAMPLE POINT	SUSP. SOL.	TOT. IRON	MANGANESE
2/14/94 (Comp. Exh. 7)	001	362 mg/L	15 mg/L	.33 mg/L
	002	107 mg/L	2.8 mg/L	.098 mg/L
9/5/95 (Comp. Exh. 11)	property line	1400 mg/L	98 mg/L	2.2 mg/L
2/7/96(Comp. Exh. 12)	001	116 mg/L	7.7 mg/L	.26 mg/L
	southwest corner	202 mg/L	4.7 mg/L	.13 mg/L
	southeast corner	420 mg/L	11 mg/L	.32 mg/L
2/9/96 (Comp. Exh. 13)	upstream of runoff	194 mg/L	1.3 mg/L	.47 mg/L
	east-gate house	1,412 mg/L	79 mg/L	4.3 mg/L
	southeast corner	2,148 mg/L	156 mg/L	11 mg/L
	southwest corner	2,344 mg/L	120 mg/L	6.6 mg/L
	south side receiving stream (100 ft away)	1,420 mg/L	147 mg/L	7.7 mg/L
	south side receiving stream (350 ft away)	2,160 mg/L	137 mg/L	7.4 mg/L
	outfall 001	1,024 mg/L	127 mg/L	8.5 mg/L
	1,200 ft. downstream of outfall 001	5,480 mg/L	121 mg/L	7.1 mg/L
	northwest corner - entering small pond	744 mg/L	54 mg/L	1.8 mg/L
	discharge from small pond to large pond	456 mg/L	2.8 mg/L	N/A

ESG Watts' NPDES permit expired on August 1, 1991, and, by its terms, ESG Watts was to seek a renewal and modification within 180 days prior to that expiration date. ESG Watts applied for a permit renewal on February 18, 1991, approximately 18 days past the deadline. After a considerable amount of time, the Agency denied the requested permit renewal and modification. Eventually, on April 16, 1996, the Agency renewed ESG Watts' NPDES permit for Taylor Ridge. The new permit now recognizes eight discharge points, as opposed to the two discharge points which were originally authorized in the first NPDES permit issued by the Agency. Also, the renewed permit required ESG Watts to compile a stormwater pollution prevention plan which was due to the Agency by September 16, 1996. Tr. at 176. As of the date of the hearing on October 29-30, 1996, a formal stormwater pollution prevention plan had not yet been submitted, and stormwater was continuing to discharge from the site.[15] Tr. at 174-75.

Groundwater Contamination

Based on the groundwater samples taken by the Agency and ESG Watts, the groundwater quality data has shown groundwater exceedences. As the table below indicates, the data confirms exceedences of both class I and class II groundwater requirements as set forth in 35 Ill. Adm. Code 620.410 and 620.420 for, at least, the parameters of sulfate, iron, and, at times, manganese. See also Comp. Exh. 55.

The Agency believes that groundwater at the Taylor Ridge landfill should be classified as class I groundwater. Tr. at 460; Comp. Exh. 55 at 1. ESG Watts believes that the groundwater at the facility warrants classification as class II groundwater. Comp. Exh. 55 at 1. Mr. Liss, Agency Manager of the Groundwater Unit for the Permit Section in the Bureau of Land, testified that groundwater could be classified at the landfill as class I, and class II in some areas. Tr. at 450, 460. The table below indicates the required standards for both class I and II groundwater, as set forth in 35 Ill. Adm. Code 620.410 and 620.420.

Wells G116, G117, and G118 are upgradient of the landfill. All other wells are either downgradient or sidegradient. In its testimony and exhibits, the Agency specifically mentions sulfate, iron, and manganese as inorganics that exceed groundwater standards, so the following chart will focus on these contaminants. There has not been any data submitted for any of the organics listed in either the 35 Ill. Adm. Code 620.410 or 620.420 groundwater standards. The Agency submitted data for some organics, but there are no groundwater standards for these contaminants.

Groundwater Standards	Sulfate	Iron	Manganese
Class I*	400 mg/L	5 mg/L	0.15 mg/L
Class II*	400 mg/L	5 mg/L	10 mg/L

*Standards above are taken from 35 Ill. Adm. Code 620.410, 620.420.

[15] The Board notes that ESG Watts was in the process of drafting a stormwater pollution prevention plan. See Resp. Exh. 2; Tr. at 836-37.

IEPA Groundwater Inspection Reports from August 23-25, 1994

Sample Date	Well #	Sulfate	Iron	Manganese
08/23/94	G113	510 mg/L	7.39 mg/L	6.22 mg/L
	G117*	34 mg/L	19.4 mg/L	.948 mg/L
	G118*	74 mg/L	10.8 mg/L	.387 mg/L
08/24/94	G103	270 mg/L	23.3 mg/L	3.09 mg/L
	G116*	59 mg/L	8.79 mg/L	.505 mg/L
	G112	240 mg/L	5.11 mg/L	.467 mg/L
	G120	143 mg/L	16.0 mg/L	6.9 mg/L
	G102	N/D	N/D	N/D
08/25/94	G111	129 mg/L	21.1 mg/L	3.69 mg/L
	G121	30 mg/L	3.34 mg/L	.643 mg/L
	G13(D)	87 mg/L**	3.47 mg/L**	.767 mg/L**

* = Upgradient
** = Dissolved metals
Note: All concentrations represent total metals in sample except for well G13(D).
N/D = No Data

ESG Watts' Quarterly Groundwater Sampling Reports 1992-1996

Sample Date	Well #	Sulfate	Iron	Manganese
11/12/91	G102	708 mg/L	.03 mg/L	N/D
	G103	560 mg/L	.03 mg/L	N/D
	G116*	40 mg/L	.11 mg/L	N/D
	G117*	30 mg/L	.03 mg/L	N/D
08/18/92	G111	62 mg/L	.03 mg/L	N/D
	G112	225 mg/L	.03 mg/L	N/D
	G116*	40 mg/L	.06 mg/L	N/D
	G117*	34 mg/L	.03 mg/L	N/D
08/30/93	G111	93 mg/L	3.3 mg/L	N/D
	G112	227 mg/L	.29 mg/L	N/D
	G117*	17 mg/L	.19 mg/L	N/D
	G118*	133 mg/L	3.8 mg/L	N/D
08/08/94	G103	267 mg/L	17.6 mg/L	N/D
	G113	590 mg/L	8.16 mg/L	N/D
	G116*	52 mg/L	.19 mg/L	N/D
	G118*	92 mg/L	3.19 mg/L	N/D
03/19/96	G103	340 mg/L	.1 mg/L	3.37 mg/L
	G111	.002 mg/L	5.74 mg/L	2.75 mg/L
	G116*	54 mg/L	.31 mg/L	.73 mg/L
	G117*	28 mg/L	10.2 mg/L	.86 mg/L

* = Upgradient
N/D = No Data

In the Agency's denial of the significant modification on February 16, 1995, ESG Watts was notified that the groundwater data submitted showed exceedences of class I and class II water quality standards for inorganic parameters. Resp. to New Violations at 2. When the Agency denied the sig mod permit to ESG Watts, it listed nine denial points. One of those denial points was that ESG Watts lacked a groundwater assessment monitoring program. Tr. at 37. The Agency views groundwater assessment as significant since such information is used to make a determination as to whether or not groundwater is impacting the environment. Tr. at 37.

During the Section 31(d) (415 ILCS 5/31(d) (1994)) meeting held with the Agency in October 1995, ESG Watts agreed to perform groundwater assessment and monitoring.[16] On January 9, 1996, the Agency issued permit number 1995-374-SP (Comp. Exh. 56) to ESG Watts requiring the landfill to perform groundwater assessment and groundwater monitoring.[17] Tr. at 464-65. The last set of groundwater sample results contained in the record were from April 1996. Comp. Exh. 55 at 2. Based on those samples, Mr. Liss testified that the organic contamination detected in the wells was a result of releases from the landfill. Comp. Exh. 55 at 2. As of the date of the hearing, the landfill had not performed any groundwater assessments. Tr. at 464. Moreover, ESG Watts had not complied with the requirements in its groundwater monitoring permit. Tr. at 465.

Mr. Liss testified that landfill gas can contribute to contamination of groundwater by putting additional pressure within the landfill itself. Tr. at 462. The gas can migrate through permeable sediments and cause gas contamination to groundwater. Tr. at 462-63. Mr. Liss believes that the landfill is producing gas at a rate of 2,000 cubic feet per minute. Therefore, Mr. Liss testified that the landfill gas is putting pressure inside the landfill. Tr. at 463. This pressure increases the chances of the gas contributing to the groundwater contamination. Tr. at 464.

Gas Emissions and Air/Odor Violations

Gas Management System. Gas emissions, especially methane, have caused several issues to arise at the landfill. The Agency testified that landfill gas can manifest itself to cause a malodorous situation. Tr. at 46. Additionally, the constituents of gas may be harmful or may contain toxic compounds. Tr. at 47. Also, gas can migrate off-site and cause significant environmental effects such as distress to vegetation and gas explosions in private homes. Tr. at 48.

Where financially practical, the Agency encourages the collection and use of landfill gas through the gas management system. Tr. at 49-50. Mr. Child testified that this facility has had a need to control its gas management for quite a while. Tr. at 50. Mr. Child testified

[16] Pursuant to Section 31(d), the Agency is required to meet with a party in an effort to resolve conflicts before filing a formal complaint.

[17] Such permit has been appealed and is currently pending before the Board (see ESG Watts, Inc. v. Illinois Environmental Protection Agency, PCB 97-210).

that, as the volume of wastes increase in the landfill, gas production increases. Tr. at 51. Landfill gas production peaks within five to ten years of the first placement of waste, but will probably begin to slow down after about 20 years. Tr. at 51. Mr. Child testified that this landfill is probably very close to peak gas production. He could not calculate specifically how much gas is produced by the landfill. Tr. at 51, 55.

On June 13, 1996, the Agency issued a supplemental permit to ESG Watts (Supplemental Permit No. 1996-087-SP) for a gas management system. Tr. at 43; see Comp. Exh. 2. The supplemental permit was issued to control the gas problem that was found at the landfill, not to allow acceptance of more waste or a different kind of waste. Tr. at 43. Further, the supplemental permit was issued because the Agency agreed that a gas management system was a good idea for the environment. Tr. at 44-49. ESG Watts did not pay for the landfill gas management system but contracted with RTC to install such system. Tr. at 573, 579.

As of the date of hearing, Mr. Fortelka testified that the gas management system had been partially installed. Tr. at 574. He stated that the gas collection wells were currently in place. Tr. at 574. The cost estimate for installation of the Taylor Ridge processing of gas is $4,500,000. Tr. at 576. RTC paid for all capital costs of the gas management system, including permits and application fees. Tr. at 579-80. If the current gas output of the plant meets expectations, ESG Watts will receive about $15,000 to $25,000 per month in royalties. Tr. at 579. In that the plant may operate for 10 to 15 years, the royalty amounts will decrease as the output of the facility decreases over time. Tr. at 579. Mr. Fortelka stated that RTC had a projected timeframe to begin operating the facility by mid-1997. The design will be able to handle as much gas as 2,000 cubic feet per minute. Tr. at 577. Mr. Fortelka could not estimate how much gas will be generated once the gas management system is in place, but stated that prior to installation of such system, the gas simply would escape into the atmosphere. Tr. at 577.

Odor. Odor from the landfill has been a source of problems for the landfill's neighbors and has been detected on a number of occasions by Agency personnel. Mr. Whitley testified that he has experienced problems with odors from the landfill. Tr. at 267. He believes that his life has been negatively impacted as a result of the odors. As an example, Mr. Whitley testified that he and his family cannot even go outside due to the smell at times. They have to shut the doors, close the windows, and turn on the air conditioner. Tr. at 268. With regard to the landfill gas emissions, Mr. Whitley has not observed any environmental impacts attributable to such emissions, although Mr. Whitley testified that he does have some dead trees on his property. Tr. at 269-70; see Comp. Exh. 21, photos 9, 11; Comp. Exh. 20, photo 26. On September 19, 1996, Mr. Whitley observed some excavated waste which had been left uncovered or exposed, which created an offensive odor. Tr. at 274.

Mr. Martens and his family, who live to the north of the landfill, are bothered by odors. Tr. at 329. Mr. Martens smells odors from the landfill year-round and has kept a written log of the odors (see Comp. Exh. 24), most notably during July and August 1995. Tr. at 334. The log showed the odors were consistently rated as a 10 on a scale of 1 to 10 (10

being the worst). Comp. Exh. 24 at 1-2. He claims the odors smell like "rotten garbage" and "raunchy smells," and that the odors have unreasonably interfered with his enjoyment of life and property. Tr. at 330, 339. Though the landfill personnel have attempted to place cover on the landfill to prevent the odors, the odors have eventually returned. Tr. at 335.

Ms. Schultz lives about a half a mile from the landfill and experiences odors from the landfill strong enough to cause her and her family to move indoors and close the windows. Tr. at 374, 376. Ms. Schultz testified that while the odors disperse after a few days, they inevitably return. Tr. at 373.

Mr. Mehalic and Mr. Kammueller also testified to offensive odors at the landfill, caused variously by gas, exposed refuse, and leachate. Mr. Mehalic, on April 13, 1994, noticed an odor problem at the southwestern portion of the landfill, the same spot where he had previously noticed some leachate seeps. He concurrently noticed a gas hole in the area of the odors.[18] Tr. at 386; see Comp. Exh. 37, photo 8. During a subsequent inspection, on May 25, 1994, the gas holes had been remediated. Tr. at 390.

The malodorous problems continued into 1995 and 1996. On February 9, 1995, Mr. Mehalic made an inspection due to complaints by neighbors. Tr. at 398. The odor seemed to be strongest on the western slope of the landfill. Tr. at 399. The landfill made an attempt to cover the odor with soil from the borrow pit; however, the odor continued to linger. Tr. at 399. Further, on May 18, 1995, Mr. Mehalic noticed odors around the areas at the southwestern and western portion of the landfill. Tr. at 404. Such odors were emanating from gas holes at those locations. Tr. at 404; see Comp. Exh. 43; photos 16, 17. The smell was malodorous. Tr. at 404

During an inspection on July 12, 1995, Mr. Mehalic observed another gas hole which was "audible and odorous." Tr. at 405-06; Comp. Exh. 44, photo 10. There was stressed vegetation in the area around the gas hole which Mr. Mehalic believed was caused by the gas. Tr. at 406. On August 7, 1995, Mr. Kammueller smelled an odor of landfill gas, which he smelled during a previous inspection in February 1994. Tr. at 177-78. On August 23, 1995, Mr. Mehalic observed malodorous odors on the western portion of the landfill. Tr. at 410. Further, on October 26, 1995, Mr. Mehalic detected a malodorous odor at the western side of the landfill. He analogized it to "four-week-old garbage sitting in the sun for weeks." Tr. at 414. The landfill was trying to address the odor problems that day by completing four borings. Tr. at 415. Next, on January 23, 1996, there were continuing odor problems. Tr. at 415. On May 23, 1996, Mr. Mehalic again observed stressed vegetation which he believed was caused by a gas hole. Tr. at 420-21; see Comp. Exh. 49, photos 5, 10, 16. On July 18, 1996, Mr. Mehalic noticed an odor on the southeastern corner of the landfill accompanied by stressed vegetation. Tr. at 422-23.

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[18] A gas hole is created by decomposition of the waste in place. As it decomposes, it creates methane and other odors associated with it. When the pressure increases, it seeks a path of least resistance and protrudes in that area. Tr. at 387.

In the site-inspection reports compiled by Mr. Chenoweth at the Taylor Ridge landfill, odor problems were reported frequently. Tr. at 431. Mr. Mehalic never conducted any off-site inspections to determine whether or not odor was a continuing problem on the neighbors' property. Tr. at 447. Long-term odor problems still need to be addressed by the landfill. Tr. at 432.

It is expected that once the gas management system is fully operational, much of the gas odor will dissipate. The installation of the system itself caused an odorous situation. The drillings pertaining to the landfill gas management activities have worsened the odor problems. Tr. at 276. According to the requirements of the permit for the gas recovery system, the landfill personnel is supposed to dispose of any waste extracted from a drilled boring in the active working area of a particular day. Tr. at 425; see Comp. Exh. 2. However, on July 18, 1996, Mr. Mehalic observed uncovered refuse removed from the borings which caused the same malodorous odor he had noticed during earlier inspections. Tr. at 425-26. Additionally, Mr. Whitley believes that the well drilling operation, which took place at the landfill in July 1996, caused the landfill personnel to leave a truck sitting completely full of borings, and drillings after closing hours. Tr. at 273-74; see Comp. Exh. 21.

ANALYSIS OF ALLEGED VIOLATIONS

General Considerations

The eight-count complaint alleges violations of the Act and Board rules that touch all three environmental media: land, water, and air. The Board has reorganized those allegations into media-oriented sections, with appropriate subsections. For example, in the land section, the Board discusses all alleged violations of landfill regulations and statutory provisions: financial assurance and cost estimate failures; operational violations; failure to maintain adequate cover; and failure to control leachate. In the water section, the Board discusses the issues of runoff and erosion, NPDES permitting and effluent violations, and groundwater contamination. In the air section, the Board discusses complainant's allegation that odor from the landfill has caused air pollution.

This section focuses on the legal issues which form the underpinning of each violation and does not indicate the Board's specific weighing of Section 33(c) (415 ILCS 5/33(c) (1996)) factors to each and every violation alleged. While the latter approach is appropriate in some enforcement cases (see, comparatively, People v. ESG Watts (February 5, 1998), PCB 96-233), in this case the Board believes that it is most appropriate to apply the Section 33(c) factors to the totality of circumstances and to the requested penalty of permit revocation, as styled and argued by the parties. See *infra* at 48-50. While the Board has considered the Section 33(c) factors as they relate to each alleged violation, in this section the Board only sets them forth in assessing the air violation, because of the inherent questions of reasonableness therein. See *infra* pp. 44-47.

LAND: Alleged Violations of Section 21 of the Act and the Board's Waste Disposal Regulations

Regarding land violations specific to the operation of landfills, complainant generally alleges violations of the following sections of the Act: Sections 21(d)(1) (operation of a landfill in violation of a permit condition); 21(d)(2) (operation of a landfill in violation of a Board regulation), 21(e) (unlawful acceptance of waste at a site which fails to meet Board regulations); 21(o)(13) (failure to submit cost estimates, performance bond or other security for the landfill); 21.1(a) (failure to provide post closure and post-closure financial assurance); 21(o)(5) (failure to cover refuse from a previous day's operation); 21(o)(6) (failure to timely provide final cover). See 415 ILCS 5/21(d)(1), 21(d)(2), 21(e), 21(o)(5), 21(o)(6), 21(o)(13), 21.1(a) (1994).

Complainant also alleges various permit violations and violations of the following sections of the Board's Waste Disposal Regulations: Section 807.623 (failure to provide cost estimates every two years or by permit condition); Section 814.104 (failure to timely file sig mod application); Section 807.305(a)(b) and (c) (operation of a landfill without adequate cover); Section 807.314(e) (operation of a landfill without adequate measures to monitor and control leachate). See 35 Ill. Adm. Code Sections 807.305(a)(b)(c), 807.314(e), 807.623, 814.104.

For ease of discussion, the Board divides these various allegations into three categories: Cost Estimates and Financial Assurance Violations; Operation of a Landfill Without an Approved Sig Mod; and Operational Violations Concerning Cover and Leachate.

Cost Estimates and Financial Assurance Violations

Argument. Complainant contends that ESG Watts failed to file current cost estimates as required by permit and regulation on November 28, 1992, and again on November 28, 1994, and, accordingly, is in violation of two permit conditions[19] and Section 807.623(a) of the Board's Waste Disposal Regulations.[20] Although ESG Watts included cost estimates in its sig mod application in September 1994, the sig mod application was denied and, therefore, the complainant believes the cost estimates must be considered untimely. Also, complainant

[19] Special Condition 8 of Supplemental Permit No. 1991-292-SP issued December 24, 1991, provides: "The operator shall file revised cost estimates for closure and post-closure care at least once every two years . . . . The revised cost estimates are due on or before November 28, 1992." Special Condition 2 of Supplemental Permit No. 1993-167-SP, issued provides: The operator shall file revised cost estimates for closure and post-closure care at least every two years . . . . The next revised cost estimates are due on or before November 28, 1994."

[20] Section 807.623(a) provides that "[t]he operator must revise current cost estimate at least once every two years. The revised current cost estimate must be filed on or before the second anniversary of the filing or last revision of the current cost estimate." 35 Ill. Adm. Code 807.623(a).

argues that ESG Watts is in violation of its financial assurance obligations by failing to increase its trust fund to $1,299,464 by September 11, 1996, as required.

ESG Watts does not deny that it is in violation of its financial assurance funding obligations, but points to its alleged good faith efforts to satisfy all statutory and regulatory requirements. Resp. Br. at 13. With regard to the funding, ESG Watts provided testimony that it is looking into the issue of fully funding its obligations. With regard to the alleged permit violations regarding cost estimates, ESG Watts does not deny that it did not file cost revisions prior to November 28, 1992. However, ESG Watts depends on its subsequent compliance to argue that such untimely submittal does not warrant a significant penalty. ESG Watts relies on its submission of the cost estimates, in conjunction with its requested sig mod permit application in September 1994, to establish compliance with the cost revision requirements, which it argues would have been due on the permits' two-year anniversary date, in April 1995.

Discussion and Findings. The obligation to biannually file cost estimates for closure and post-closure care, as well as the obligation to fully provide the requisite amount of financial assurance, is an obligation every owner of a landfill in Illinois owes the taxpayers of this State and is part and parcel of the cost of doing business here. This is because these estimates and financial assurance form the basis for our reliance on the landfill owner's commitment that, upon a landfill closure, the environment will be protected and, if necessary, made whole.

Section 807.623, Permit Condition 8 of Supplemental Permit No. 1991-292-SP, and Sections 21(d)(1), 21(d)(2), 21(o)(13). The facts clearly show that ESG Watts ignored its obligation to file revised cost estimates in 1992, as required by Supplemental Permit No. 1991-292-SP, and by Board rule. Those costs were due to be filed on November 28, 1992. They were not filed until April 30, 1993. As argued by the complainant, the failure to file cost estimates as required by Section 807.623 of Board regulations and the established permit condition constitutes a violation of Sections 21(d)(1) and (d)(2) of the Act, as ESG Watts is operating a waste-disposal operation which is in violation of both permit conditions and rules. It also is a violation of Section 21(o)(13) which clearly makes it a specific violation to fail to submit "any cost estimate for the site or any performance bond or other security for the site as required by this Act or Board rules."

While the violation of the cost estimate requirements is uncontested for the 1992 cost estimate submittal, ESG Watts contests the complainant's argument that it did not timely submit the cost estimates in accordance with its November 28, 1994, obligation. Indeed, complainant admits that cost estimates were included in ESG Watts' sig mod permit application that was filed in September 1994. However, complainant argues that since that permit application was rejected, the cost estimates should not or could not be considered "filed." We disagree. In 1994, ESG Watts timely submitted its revised cost estimates. Accordingly, the Board finds ESG Watts in violation of Permit Condition 8 of Supplemental Permit No. 1991-292-SP, Sections 21(d)(1), 21(d)(2), 21(o)(13), of the Act, and 35 Ill. Adm.

Code 807.623 for failing to timely file its 1992 cost estimate, but finds ESG Watts in compliance with respect to its 1994 cost estimate obligation.

Permit Condition II.7 of Supplemental Permit No. 1996-087-SP and Sections 21(d)(1), 21(o)(13), 21.1(a). The obligation to file cost estimates for closure directly keys to the obligation to have sufficient money available in the landfill's financial assurance fund so that, upon closure, the State is assured that enough money is available for the landfill owner or operator to properly close and to negate whatever environmental impacts the landfill may have caused. Taylor Ridge landfill is scheduled to close in the year 2000. The cost estimate for closure, as reflected in the record, is $1,299,464. That cost estimate was submitted by ESG Watts and approved by the Agency when it approved Supplemental Permit No. 1996-087-SP in June 1996. In accordance with that permit, ESG Watts was to have posted the requisite $1,299,564 within 90 days of the issuance of that permit, on or before September 11, 1996. At the time of hearing in this matter, the financial assurance fund for Taylor Ridge landfill contained only $435,000.

Failure to maintain the requisite amount of money in a landfill owner's financial assurance fund is a violation of the specified permit condition as listed in II.7 and II.8 of Supplemental Permit No. 1996-087-SP. As complainant correctly points out, this failure constitutes violations of Sections 21(d)(1), 21(o)(13) and 21.1(a) of the Act. 415 ILCS 5/21(d)(1), 21(o)(13), 21.1(a) (1994). Accordingly, the Board finds ESG Watts in violation of each of those provisions for failing to timely provide the requisite amount of financial assurance for closure.

Operation of Landfill Without an Approved Sig Mod

Argument. Complainant argues that ESG Watts' continued operation of the Taylor Ridge landfill is in violation of Section 21(e)[21] of the Act because the landfill does not meet the requirements of the Act and Board regulations. Specifically, the complainant argues that Section 814.105(b)[22] of the Board's Waste Disposal Regulations only authorizes an owner or operator to continue operations under existing permits where the sig mod application has been timely filed. While ESG Watts did eventually file a sig mod application, the denial of which is pending before the Board, complainant argues that ESG Watts' late-filed sig mod permit

[21] Section 21(e) of the Act provides that: "[n]o person shall: dispose, treat, store or abandon any waste, or transport any waste into this State for disposal, treatment, storage or abandonment, except at a site or facility which meets the requirements of this Act and of regulations and standards thereunder." 415 ILCS 5/21(e) (1994).

[22] Section 814.105(b) provides that: "[a]n owner or operator who has timely filed a notification pursuant to Section 814.103 and an application for significant permit modification pursuant to Section 814.104 shall continue operation under the terms of its existing permits until final determination by the Agency on its application and any subsequent appeal to the Board pursuant to Section 40 of the Act. During this time, the owner or operator will be deemed to be in compliance with all requirements of this Part." 35 Ill. Adm. Code 814.105(b).

(and appeal thereof) cannot be used as a defense to the charge that this landfill is operating outside of the relevant law. Accordingly, complainant argues that "unauthorized waste disposal has been ongoing since September 1, 1993, due to the lack of an approved sig mod or the pendency of an appeal of the denial of a timely filed application." Comp. Br. at 4.

ESG Watts does not dispute that its filing of the sig mod permit was untimely and, accordingly, constituted a violation of Section 814.104 of the Board's regulations. However, it argues that it has already been adjudicated in violation for its failure to timely file its sig mod application (see People v. ESG Watts (May 4, 1995), PCB 94-127), and it cannot be again held in violation for the same offense in this matter. ESG Watts further argues that the Board, in its decision in PCB 94-127, held that ESG Watts' submission of the sig mod, albeit late, was tantamount to compliance. Resp. Br. at 14. ESG Watts points out that, subsequent to that adjudicated violation, it has twice submitted a sig mod permit application, has twice been denied those permits, and has filed appeals to the Board of each denial.

A related issue is the groundwater monitoring allegation in Count II. Complainant argues that ESG Watts is in violation of Special Condition 1 of Supplemental Permit 1993-167-SP and Section 807.502 of the Board's Waste disposal Regulations. ESG Watts argues that is has submitted a groundwater monitoring plan in its sig mod application which resulted in the permit which has been appealed in PCB 95-110.

Discussion and Findings. ESG Watts is correct that, in our case People v. ESG Watts (May 4, 1995), PCB 94-127, the Board has already found it in violation of Section 814.104 of the Board's rules and Section 21(d)(2) of the Act. The Board will not again hold ESG Watts in violation of those sections for its untimely filed sig mod. Further, complainant's ancillary argument is misplaced in the context of this case. If indeed Section 807.105 only allows continued operation of landfills by those who have timely filed sig mods, complainant should have made that argument earlier: in the context of PCB 94-127 or prior to discussions with ESG Watts over the two sig mod applications it ultimately did file. As it is, this argument is untimely made and the Board will not find a violation of Section 21(e) based only on the continued operation of Taylor Ridge without a sig mod permit or an approved groundwater monitoring program.

Operational Violations Concerning Cover and Leachate

Argument. Complainant argues that the testimony of Mr. Mehalic, as well as the inspection reports of Mr. Chenoweth, establish violations of Sections 807.305(a), (b) and (c) regarding daily cover, intermediate cover, and final cover.[23] Complainant also argues that these regulatory violations constitute violations of Sections 21(d) (2) and 21(o)(5) and (6) of the Act. Complainant argues that these cover violations have contributed to the landfill's problems with contaminated runoff, leachate, and erosion.

[23] Complainant struck, at hearing, all allegations pertaining to alternate daily cover.

Complainant also argues that ESG Watts has operated Taylor Ridge landfill in a manner that has not controlled leachate, in violation of Section 807.314(e) of the Board's regulations.

Regarding cover, ESG Watts denies that the evidence presented by complainant proves as many violations as complainant argues. Further, ESG Watts points to the testimony of Mr. Brao, which indicates that "final cover is in place on the vast majority of the landfill." Resp. Br. at 22. Regarding leachate, ESG Watts argues it has taken many steps to control leachate.

Discussion and Findings. Providing adequate cover at a landfill helps ensure that the landfill will not develop problems with leachate, refuse, runoff, and odor. The evidence clearly indicates that, at various points in time, the landfill has violated all three cover requirements: daily cover, intermediate cover, and final cover.

Section 807.305(c) and Sections 21(d)(2) and 21(o)(6). Section 807.305(c) of the Board's Waste Disposal Regulations requires that two feet of suitable material be placed over the entire surface of the final and inactive portion of a landfill, within 90 days of that portion being placed in the final lift. While ESG Watts is correct that Mr. Brao testified that a majority of the inactive portion of the landfill has adequate final cover, he importantly also testified that an area of approximately one-half acre of the inactive portion of the landfill clearly shows insufficient final cover. Accordingly, ESG Watts is in violation of Section 807.305(c) of the Board's Waste Disposal Regulations and also Sections 21(d)(2) and 21(o)(6) of the Act.

Section 807.305(a) and Sections 21(d)(2), 21(o)(5). Section 807.305 (a) requires that a compacted layer of at least six inches of suitable cover material (daily cover) must be placed on all exposed refuse at the end of each operating day. Also, Section 21(o)(5) of the Act makes it unlawful for a landfill to leave uncovered refuse remaining from any operating day at the end of the day. Regarding daily cover, the record shows that problems were recognized, documented, and testified to by Agency personnel from December 3, 1992, through May 23, 1996. Accordingly, the Board finds ESG Watts in violation of Section 807.305(a) of the Board's Waste Disposal Regulations and, derivatively, Section 21(d)(2) of the Act. Further, the Board finds ESG Watts in violation of Section 21(o)(5) of the Act, which specifically prohibits uncovered refuse from remaining from any previous operating day.

Section 807.305(b) and Section 21(d)(2). Section 807.305(b) of the Board's Waste Disposal Regulations requires that 12 inches of suitable material shall be placed on all surfaces of the landfill where no additional refuse will be deposited within 60 days, but which is not yet a "final" or "inactive" area of the landfill. This requirement is known as "intermediate cover." Regarding intermediate cover, the record shows that problems were recognized, documented, and testified to by Agency personnel from December 3, 1992, through May 23, 1996. Accordingly, the Board finds ESG Watts in violation of Section 807.305 (b) of the Board's regulations and, derivatively, Section 21(d)(2) of the Act.

Section 807.314(e) and Section 21(d)(2). Since leachate is a special problem for landfills, Board Waste Disposal Regulations specifically require landfills to monitor and

control leachate. Section 807.314(e) of the Board's Waste Disposal Regulations requires that "no person shall cause or allow the . . . operation of a sanitary landfill which does not provide . . . adequate measures to monitor and control leachate." The record is replete with examples of leachate problems experienced by this landfill. Virtually every inspection conducted by Mr. Mehalic from December 3, 1992, to July 18, 1996, showed leachate seeps through the landfill. Testimony from Mr. Kammueller, as well as neighbors, corroborated Mr. Mehalic's evidence regarding leachate seeps. Mr. Chenoweth himself admitted that leachate was a problem, and that he has taken several positive steps to attempt to deal with it, by flagging and repairing the affected area. However, the short-term attempts taken to alleviate the problem have clearly not been effective. The failure to take adequate measures to monitor and control leachate violates Section 807.314(e) of the Board's Waste Disposal Regulations. The Board finds ESG Watts in violation of that provision and, accordingly, in violation of Section 21(d)(2) of the Act.

WATER: Violations of Section 12 of the Act and the Board's Water Pollution Regulations

Regarding water violations specific to the operation of Taylor Ridge landfill, complainant generally alleges violations of the following Sections of the Act: Sections 12(a) (cause or allow discharge of contaminants into the environment so as to cause water pollution); 12(d) (deposit contaminants upon the land so as to create a water pollution hazard) and 12(f) (cause or allow discharge of contaminants into the environment in violation of an NPDES permit condition) and, again, Sections 21(d)(1) (operation of a landfill in violation of a permit condition) and 21(d)(2) (operation of a landfill in violation of a Board regulation). See 415 ILCS 5/12(a), 12(d), 12(f), 21(d)(1), 21(d)(2) (1996).

Complainant also alleges violations of the Section 807.313 of the Board's Waste Disposal Regulations (operation of a landfill so as to cause or allow discharge of contaminants so as to cause water pollution) and the following sections of the Board's Water Pollution Regulations: Section 302.203 (failure to keep waters of the State free from offensive conditions); Section 304.120(c) (effluent standards for deoxygenating wastes); Section 304.124(a) (effluent exceedances for iron, total suspended solids, and manganese); Section 304.141(a) (discharge contaminants in violation of NPDES permitted standards); Section 305.102(b) (failure to monitor and report as required by NPDES permit conditions) and Section 309.104(a) (requirement that NPDES permit holder apply for a renewal not less than 180 days from expiration date). See 35 Ill. Adm. Code 807.313, 302.203, 304.120(c), 304.124(a), 304.141(a), 305.102(b), 309.104(a).

Further, complainant alleges a violation of Special Condition 18 of Supplemental Permit No. 1993-167-SP, as well as violations of the effluent standards and monitoring obligations set forth in NPDES Permit No. IL0065307.

For ease of discussion, the Board divides these various allegations into two categories: Surface Water Pollution/NPDES Violations and Groundwater Contamination.

Surface Water Pollution/NPDES Violations

Argument. Complainant argues that it has proven that the Taylor Ridge landfill has caused significant water pollution in violation of the Act. Specifically, complainant argues that ESG Watts has not controlled runoff and leachate discharges. Complainant points to the two impoundments of surface waters, the retention pond and the Whitley pond, which it considers waters of the State and which ultimately discharge into the Mississippi River. Further, complainant argues that the ESG Watts' operation of the landfill is in contravention of the operating permit issued on August 27, 1993, because it does not meet the mandate therein that site surface drainage shall not adversely effect adjacent property.

Complainant also asserts that it has proven ESG Watts guilty of violations of effluent and water quality standards and NPDES permit conditions resulting from runoff discharges. Complainant argues that the violations have occurred since the effective date of the NPDES permit in September 1986 and exist to this day. Moreover, complainant argues that ESG Watts has failed to properly monitor the discharges from outfalls 001 and 002, as set forth in the NPDES permit and also has failed to file accurate DMRs as required by the permit. Complainant also asserts that ESG Watts' NPDES permit renewal application was untimely filed, in that it was not filed within the 180 day advance time required by 35 Ill. Adm. Code 309.104(a).

ESG Watts questions complainant's evidence regarding adverse impact on receiving streams and suggests that the NPDES-permitted outfall on the north side of the landfill (outfall 001) is not a stream at all but a naturally occurring ravine which has a steep slope and which has no more than a trickle "50% [to] 75% of the time." ESG Watts argues that the stream on the south side of the landfill (outfall 002) has water flowing in that stream only approximately 60% of the time and flows into a farm lot approximately 1,500 to 2,000 feet from the landfill. Tr. at 772-74. Accordingly, ESG Watts asserts that any reference complainant makes to adverse effect on fish habitat is speculative.

Regarding the alleged violations of permit conditions concerning monitoring and reporting, ESG Watts basically argues that the landfill employees were honestly mistaken about their obligations. ESG Watts asserts that though they had been wrongly reporting "no discharge" on the DMRs, such a responsibility should be borne by the Agency since they accepted the DMRs at face value for approximately nine years without ever communicating concerns to the landfill operators. See discussion regarding *laches*, *supra* at *6-7*. Also, ESG Watts argues that the evidence of water pollution based upon the 1986 inspection report is too old to be of use and that the Board should, as a matter of law, find that a nine-year unexplained delay in bringing an enforcement action is patently unreasonable. Resp. Br. at 7.

Discussion and Findings. Pollution of the State's waters is a violation of Section 12 of the Act. See 415 ILCS 5/12(a) (cause or allow discharge of contaminants into the environment so as to cause water pollution), (d) (deposit contaminants upon the land so as to create a water pollution hazard) and (f) (cause or allow discharge of contaminants into the environment in violation of an NPDES permit condition). In order to protect the waters of the

State from degradation by the operation of landfills, Board Waste Disposal Regulations set forth at 35 Ill. Adm. Code 807.313 specifically require that:

> No person shall cause or allow operation of a sanitary landfill so as to cause or tend to cause or threaten or allow the discharge of any contaminants into the environment in any state so as to cause or tend to cause water pollution in Illinois, either alone or in combination with matter from other sources, or so as to violate regulations or standards adopted by the Pollution Control Board under the Act. 353 Ill. Adm. Code 807.313.

Water pollution, as defined by Section 3.55 of the Act states:

> "WATER POLLUTION" is such alteration of the physical, thermal, chemical, biological or radioactive properties of any waters of the State, or such discharge of any contaminant into any waters of the State, as will or is likely to create a nuisance or render such waters harmful or detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate uses, or to livestock, wild animals, birds, fish, or other aquatic life. 415 ILCS 5/3.55 (1994).

Waters of the state, as defined by Section 3.56 of the Act states:

> "WATERS" means all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this state. 415 ILCS 5/3.56 (1994).

Permit Condition 18 and Section 21(d)(1). Testimony of the landfill neighbors shows a clear violation of Special Condition 18 of Supplemental Permit No. 1993-167-SP. That condition provides that "[s]ite surface drainage, during development, during operation and after the site is closed, shall be such that no adverse effects are encountered by adjacent property owners." Site surface drainage, or stormwater runoff, from the Taylor Ridge landfill appears from the evidence to be virtually singularly responsible for the silt accumulation in Mr. Whitley's pond, accumulation which has cost Mr. Whitley time, money, and enjoyment of his property. Accordingly, the Board finds ESG Watts in violation of Special Permit Condition 18 of Supplemental Permit No. 1993-167-SP. Having found ESG Watts in violation of a permit condition, the Board accordingly finds ESG Watts in violation of Section 21(d)(1) of the Act.

Section 302.203 and Section 21(d)(2). Section 302.203 of the Board's Water Pollution Regulations also requires that waters of the State be free from offensive conditions, specifically defined as "sludge or bottom deposits, floating debris, visible oil, odor, plant or algae growth, color or turbidity of other than natural origin . . . ." Testimony provided at hearing by the neighbors of the landfill, in particular the stark testimony of Mr. Siebke and Mr. Whitley, as well as the Agency's inspectors, provides clear and consistent examples that stormwater runoff

contained refuse and debris of all sorts and sizes. Also, Mr. Mehalic observed quantities of refuse in standing water on February 14, 1996, and again on May 23, 1996. Tr. at 419-20; Comp. Exh. 48, photos 15, 16; Comp Exh. 49, photo 11. Accordingly, the Board finds ESG Watts in violation of Section 302.203 and, consequently, in violation of Section 21(d)(2) of the Act.

Section 305.102(b) and Sections 21(d), 12(f). Section 305.102(b) of the Board's Water Pollution Regulations requires that all holders of NPDES permits comply with the monitoring, sampling, recording, and reporting requirements set forth in the permit. NPDES Permit No. IL0065307, which permitted the discharge of stormwater through designated outfall 001 and outfall 002 at Taylor Ridge landfill, required ESG Watts to monitor the outfalls and file DMRs showing the results. The permit obligation was to take samples of outfall 001 when discharging and of outfall 002 one time per month. Yet, ESG Watts personnel admittedly did not monitor outfall 002 since the issuance of the NPDES permit in 1986, and the evidence suggests that ESG Watts failed to monitor outfall 001 for at least one year prior to 1994. On their DMRs, ESG Watts would routinely report "no discharge" when stormwater flowed naturally through the outfalls. While the evidence does not prove that the employees intended to willfully mislead the Agency, ESG Watts' defense of mistake or *laches* is not compelling. Accordingly, the Board finds ESG Watts in violation of Section 305.102(b) of the Board's Water Pollution Regulations and, derivatively, Section 21(d) of the Act. Also, Section 12(f) of the Act separately prohibits any person from violating an NPDES permit condition or Board rule implementing the NPDES program. The Board finds ESG Watts in violation of that statutory provision as well.

Sections 304.120(c), 304.124(a), 304.141(a), NPDES Effluent Conditions, and Sections 21(d), 12(f). The failure to monitor violations is especially egregious in that the evidence suggests that, while ESG Watts saved time and money by not monitoring the stormwater discharges as required, the environment has suffered. Once monitoring was done routinely, the waters have shown routine exceedences of suspended solids, iron and, to a lesser extent, manganese, all originating from the landfill. As evident from the table (see *supra* at 21-22), these exceedences constitute violations of Sections 304.120(c), 304.124(a) and 304.141(a) and applicable NPDES permit conditions. Violations of these provisions also constitute violations of Sections 21(d) and 12(f) of the Act.

Section 807.313 and Sections 12(a), 12(d). The operation of a landfill in a manner that causes water pollution is a violation of Section 807.313 of the Board's Waste Disposal Regulations. Additionally, Section 12(a) of the Act specifically declares it a violation to pollute waters of the State and Section 12(d) of the Act declares it a violation to "deposit any contaminants upon the land in such place and manner so as to create a water pollution hazard." Regardless of the ESG Watts' arguments concerning the constancy of the flow of water from the outfalls into the "ditches" and ponds which surround the landfill, the ultimate receiving body of the stormwater runoff from Taylor Ridge landfill is the Mississippi River, a water of the State. Further, Mr. Whitley's pond, and the pond on the ESG Watts property, are considered waters of the State. Testimony established that the volume of water flowing through the landfill property, basically due to rain and snow, is considerable. The landfill is

literally eroding onto neighboring property and, obviously, beyond. The record is also replete with convincing testimony that the stormwater runoff contains silt, leachate, contaminants and, often, refuse. The combined evidence of runoff, leachate, monitoring violations, and water quality exceedences causes the Board to determine a violation of each of these provisions.

Section 309.104(a). Complainant also cites ESG Watts for violation of Section 309.104(a) of the Board's Water Pollution Regulations for the untimely filing of the NPDES permit renewal. See Comp. Exh. at 15. The facts show that ESG Watts' permit application for a renewal filed on February 18, 1991, was about 18 days late. In that it took the Agency until April 16, 1996, to re-issue ESG Watts' NPDES permit, the Board believes a violation under this Section is unjustified. Accordingly, the Board does not find ESG Watts in violation of Section 309.104(a) of the Board's Water Pollution Regulations.

Groundwater Contamination

Argument. Complainant argues that the operation of Taylor Ridge landfill has resulted in the contamination of groundwater underlying the landfill in violation of the Act and the Board's groundwater quality regulations. Specifically, the complainant asserts that the operation of the landfill resulted in release of contaminants to groundwater so as to cause exceedences of the groundwater quality standards. In support of its claim, complainant cites the groundwater monitoring data submitted by the respondent and the analytical results of the groundwater sampling conducted by the Agency. Based upon the groundwater monitoring data, complainant states that the concentrations of sulfate, iron, and manganese in the groundwater underlying the landfill have exceeded the groundwater quality standards set forth in 35 Ill. Adm. Code 620.410(a) for class I, Potable Resource Groundwater.

ESG Watts disagrees with complainant's allegations that the operation of the landfill caused groundwater contamination. ESG Watts disputes complainant's conclusion that groundwater underlying the facility is class I groundwater. Regardless of the groundwater classification, ESG Watts contends that, in order to show violation of the Board's groundwater quality standards, complainant must demonstrate that the concentrations of the contaminants of concern in the groundwater are not present due to natural causes. In this regard, ESG Watts argues that all the three contaminants identified by complainant as exceeding the groundwater are naturally occurring. ESG Watts notes that concentration of iron in groundwater upgradient of the landfill exceed regulatory limits.

Discussion and Findings. Both ESG Watts' and the Agency's groundwater sampling reports indicate exceedences of the Board's groundwater quality standards set forth in 35 Ill. Adm. Code 620.Subpart D for sulfate, iron, and manganese. However, before discussing the specific violations, the Board will address the issue of whether the exceedences were caused by natural background.

ESG Watts correctly notes that the groundwater quality standards set forth in 35 Ill. Adm. Code 620 may not be exceeded except due to natural causes. See Sections 620.410(a) and 620.420(a). However, in order to show that the exceedences were caused by background,

ESG Watts has to characterize the groundwater quality upgradient of the landfill for all the three contaminants of concern. In this regard, ESG Watts has not provided any analysis of its groundwater sampling results of the upgradient wells to establish the upgradient groundwater quality for the three contaminants to show that the exceedences were not caused by the landfill.[24] The monitoring data from the Agency's and ESG Watts' groundwater monitoring reports show that the contaminants identified in the complaint were detected in the upgradient wells and in some cases the levels for iron were above the groundwater quality standard. However, both the Agency's and ESG Watts' groundwater monitoring reports show that the concentrations of sulfate, iron, and manganese were significantly higher in the downgradient wells. See table *supra* at 24. Thus, it is clear from the groundwater monitoring data that the landfill was impacting the underlying groundwater. In light of this, the Board finds that the exceedences of the Board's groundwater quality standards were caused by the landfill.

Having found that the exceedences of the Board groundwater quality standards were caused by the landfill, the Board will now examine the specific violations alleged by the complainant, starting with the violation of groundwater quality standards.

Sections 620.405 and 620.410. Section 620.405 prohibits causing a release of contaminants into groundwater so as to violate groundwater quality standards. Section 620.410, which ESG Watts is also alleged to have violated, sets forth groundwater quality standards for class I groundwater. To determine whether a violation has occurred, the Board must first determine which classification applies to the groundwater in the vicinity of the Taylor Ridge landfill.

All groundwaters of the State are designated as one of four classes of groundwater. 35 Ill. Adm. Code 620.201. Further, within any class of groundwater, a groundwater management zone may be established as a three dimensional area containing groundwater being managed to mitigate impairment caused by the release of contaminants. There is no claim or evidence here that this case involves a groundwater management zone, so we review the classifications of groundwater. Groundwater can only fall into classes I, III, and IV, involving "potable resource" groundwater, "special resource" groundwater, and "other" groundwater, respectively, if certain criteria are met; all other groundwater is considered class II, "general resource" groundwater. See 35 Ill. Adm. Code 620.220(a). There has been no assertion that the groundwater beneath the landfill might be class III or class IV groundwater. The complainant has, however, alleged that the groundwater underlying Taylor Ridge landfill is classified as class I groundwater. In this regard, complainant states that it is the responsibility of the owner/operator to propose to the Agency that the groundwater is anything other than class I groundwater. Tr. 460-61.

The criteria for classification of groundwater as class I are set forth in 35 Ill. Adm. Code 620.210, which provides:

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[24] Because the Board has not accepted post-hearing evidence pertaining to ESG Watts' sig mod application (see discussion *supra* at 4-5), any information pertaining to background groundwater quality information included in ESG Watts' sig mod application has not been considered.

Except as provided in Sections 620.230, 620.240, or 620.250, Potable Resource Groundwater is:

a) Groundwater located 10 feet or more below the land surface and within:

1) The minimum setback zone of a well which serves as a potable water supply and to the bottom of such well;

2) Unconsolidated sand, gravel or sand and gravel which is 5 feet or more in thickness and that contains 12 percent or less of fines (i.e. fines which pass through a No. 200 sieve tested according to ASTM Standard Practice D2488-84, incorporated by reference at Section 620.125);

3) Sandstone which is 10 feet or more in thickness, or fractured carbonate which is 15 feet or more in thickness; or

4) Any geological material which is capable of a:

A) Sustained groundwater yield, from up to a 12 inch borehole, of 150 gallons per day or more from a thickness of 15 feet or less; or

B) Hydraulic conductivity of 1×10^{-4} cm/sec or greater using one of the following test methods or its equivalent:

i) Permeameter;

ii) Slug test; or

iii) Pump test.

b) Any groundwater which is determined by the Board pursuant to petition procedures set forth in Section 620.260, to be capable of potable use.

Although Mr. Liss, complainant's witness, stated that the groundwater in question would be classified as class I, there is no evidence before the Board from which it can find that the groundwater under the landfill is in fact class I groundwater. There is no information in the record to show that the landfill is within the setback zone of potable water supply wells. There was no evidence submitted as to the geological makeup of the strata underlying the landfill to demonstrate that geologic makeup beneath the site meets the class I groundwater

classification criteria.[25] The Board's records reflect no determination of the status of this groundwater pursuant to a petition under Section 620.260. Accordingly, the Board cannot find that the groundwater under the landfill is class I Potable Resource Groundwater. The Board thus finds no violation of 35 Ill. Adm. Code 620.410.

However, since complainant has alleged that ESG Watts has violated 35 Ill. Adm. Code 620.405, the Board will examine whether ESG Watts has violated that Section.

35 Ill. Adm. Code 620.405 provides:

> No person shall cause, threaten or allow the release of any contaminant into groundwater so as to cause a groundwater quality standard set forth in this Subpart to be exceeded.

As noted above, absent proof that the groundwater falls into one of the more specific categories, *i.e.* class I, III or IV, the groundwater is considered class II. 35 Ill. Adm. Code 620.220(a). The Agency's groundwater monitoring reports show that the sampling results exceed the class II groundwater quality standards for sulfate and iron. The Board accordingly finds that ESG Watts has violated Section 620.405, by causing the release of contaminants into groundwater so that the standards for class II groundwater are exceeded. As noted in the complaint, the concentrations of sulfate and iron in groundwater underlying the landfill have exceeded the class II groundwater quality standard set forth at 35 Ill. Adm. Code 620.420 since at least November 12, 1991, and August 30, 1993, respectively. The Agency's monitoring reports indicate that as of August 25, 1994, levels of sulfate and iron still exceeded class II groundwater quality standard. The Board accordingly finds ESG Watts in violation of Section 620.405, from November 12, 1991, to at least August 25, 1994.

Section 620.301(a). Complainant alleges that ESG Watts has violated Section 620.301(a), which provides:

> a) No person shall cause, threaten or allow the release of any contaminant to a resource groundwater such that:
>
> 1) Treatment or additional treatment is necessary to continue an existing use or to assure a potential use of such groundwater; or
>
> 2) An existing or potential use of such groundwater is precluded.

Having found that sulfate, iron, and manganese are present in the groundwater around the landfill, and having found the landfill to be the source of the contaminants, the Board concludes that ESG Watts has caused the discharge of contaminants into groundwater. Having

[25] Because the Board has not accepted post-hearing evidence pertaining to ESG Watts' sig mod application (see discussion *supra* at 4-5), any information pertaining to groundwater classification included in ESG Watts' sig mod application has not been considered.

also found that treatment would be necessary before the groundwater could be used for consumption (*i.e*, to assure a potential use), the Board concludes that Watts has violated 35 Ill. Adm. Code 620.301(a). As noted in the complaint, the concentrations of sulfate and iron in groundwater underlying the landfill have been detected at levels above the class II groundwater quality standard set forth at 35 Ill. Adm. Code 620.420 since at least November 12, 1991, and August 30, 1993, respectively. The Agency's monitoring reports indicate that as of August 25, 1994, sulfate and iron were still present in the groundwater at levels above class II groundwater quality standard. The Board accordingly finds ESG Watts in violation of Section 620.301(a) from November 12, 1991, to August 25, 1994.

Section 620.115 and Section 12(a). Section 620.115 of the Board's groundwater protection standards prohibits any person from violating the Act or the Board's groundwater quality standards. Violations of the Board's groundwater quality standards may constitute a violation of Section 12(a) of the Act. See International Union *et al*. v. Caterpillar, Inc. (August 1, 1996), PCB 94-240, *aff'd.*, Ill. App. Ct. No. 3-96-0931 (Third Dist.) (September 10, 1997) (unpublished order under Supreme Court Rule 23). As noted previously, the concentrations of sulfate and iron in groundwater underlying the landfill have exceeded the class II groundwater quality standard set forth at 35 Ill. Adm. Code 620.420 from November 12, 1991 to August 25, 1994. The Board finds that Watts has allowed the discharge of contaminants into the environment in violation of Board regulations and standards and has caused water pollution. Accordingly, the Board finds ESG Watts in violation of Section 12(a) of the Act and 35 Ill. Adm. Code 620.115.

AIR: Alleged Violation of Section 9 of the Act and Section 807.312 of the Board's Waste Disposal Regulations

Argument. Complainant argues that ESG Watts has operated its Taylor Ridge landfill in such a way as to cause air pollution in violation of Section 9(a) of the Act (415 ILCS 5/9(a) (1994)), Section 807.312 of the Board's Waste Disposal Regulations (35 Ill. Adm. Code 807.312), and derivatively, Section 21(d)(2) of the Act (415 ILCS 5/21(d)(2) (1994)).

Complainant argues that the methane gas generated by Taylor Ridge landfill "not only contains contaminants which give it a malodorous odor, but it also contains contaminants which can interfere with the normal growth and development of nearby vegetation and plant life." Comp. Br. at 29. Complainant believes that the effects of gas emissions on the neighboring landowners and on the surrounding vegetation are "well documented." Complainant also points to emphysema and lung problems experienced by Mrs. Whitley as "conditions that the Board may properly find to be exacerbated by the landfill gas emissions." Comp. Br. at 29. The complainant argues that odor at the landfill is not a new problem, but has been "occurring for the better part of ten years." Tr. at 340. Complainant points to the testimony of Agency employees Mr. Mehalic and Mr. Kammueller as well as neighbors Mr. Whitely, Mr. Martens, Mr. Seibke, and Ms. Schultz, to establish the intensity of the odor from gas, refuse and leachate and its effect on the neighboring property owners.

Complainant admits that the gas collection system will likely result in improvements in overall gas emissions and odors emanating from the landfill. Complainant agrees that the

installation of the system was a sound environmental decision. It also posits it as a decision ESG Watts made in its own economic interest. Further, complainant argues that ESG Watts should have sought a permit for such a system much earlier than June 1996.

ESG Watts acknowledges that the landfill "from time to time, emits odors." Resp. Br. at 24. However, ESG Watts argues that the complainant has not established that the emissions or odors resulted in any injury to human, plant, or animal life, or to property. ESG Watts argues that the complainant's arguments regarding injury to plants and vegetation due to odor is speculative. ESG Watts vehemently denies that any evidence exists to support complainant's allegations regarding the poor health of Mrs. Whitley.

As to whether the odors have unreasonably interfered with the neighbor's enjoyment of the property, ESG Watts would weigh the testimony of the neighbors differently than does complainant. Specifically, ESG Watts points to testimony from the neighbors which suggests that the odor comes and goes, is dependent on wind direction, is not weekly, has not interrupted entertainment, and has not forced neighbors inside. Further, ESG Watts points out that three of the four witnesses regarding odor moved to their property knowing that the landfill was in operation.

Discussion and Findings. Section 9(a) of the Act (415 ILCS 5/9(a) (1994)) makes it unlawful for any person, including a landfill operator, to:

> Cause or threaten or allow the discharge or emission of any contaminant into the environment in any State so as to cause or tend to cause air pollution in Illinois, either alone or in combination with contaminants from other sources, or so as to violate regulations or standards adopted by this Act;

Specifically regarding landfills, the Section 807.312 of the Board's Waste Disposal Regulations, 35 Ill. Adm. Code 807.312 (1994), prohibits the operation of a landfill in such a way that it would cause air pollution. Air pollution is defined in Section 3.02 of the Act as:

> the presence in the atmosphere of one or more contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property. 415 ILCS 5/3.02 (1994).

The Board agrees with ESG Watts that scant, if any, record evidence exists which connects the landfill gas emissions with any injury to human health. Though complainant argues that Mrs. Whitley suffered from emphysema which may have been exacerbated by the gas emissions (Comp. Br. at 29), there is no medical or scientific testimony demonstrating that the odors have had this effect. Without medical or scientific testimony of causation, the Board cannot find that complainant has shown any injury to health from the odors. See Draper and Kramer Inc. v. Pollution Control Board, 40 Ill. App. 3d 918, 921-22, 353 N.E.2d 106, 109

(1st Dist. 1976) (reversing finding of air pollution violation based on injury to health when no scientific testimony introduced on causation); State of Illinois v. Forty-Eight Insulation's, Inc. (September 30, 1976), PCB 74-480, slip op. at 7, (finding no injury to health in air pollution case where no medical testimony was submitted to verify or quantify the injury); IEPA v. W.F. Hall Printing Company (September 15, 1977), PCB 73-30, slip op. at 7, (finding no injury to health in air pollution case where the Agency "brought no expert testimony to link alleged physical ill effects to [respondent's] emissions"). See also Donetta Gott *et al*. v. M'Orr Pork, Inc. (February 20, 1997), PCB 96-68, slip op. at 13.

Likewise, evidence is lacking that odor from the landfill harmed plant life or property. While there is some testimony which implied that the gas emissions from the landfill have created problems in development of its vegetative cover, there is no concrete evidence or testimony in the record which demonstrates a nexus between the gas emissions and loss of vegetation or dead trees. Therefore, the Board will not find that the harm to vegetation that was discussed in the record is attributable to landfill gas.

Nonetheless, ESG Watts will be found to have caused air pollution in violation of the Act and Board regulations if it is proven that odors from the landfill caused an "unreasonable interference with the enjoyment of life or property." Testimony from neighbors and Agency inspectors (from inspections performed by both Mr. Mehalic and Mr. Kammueller on various dates from 1994-1996) clearly establish that there is an odor which emanates from the landfill. Whether that odor constitutes an "unreasonable interference with the enjoyment of life or property," requires the Board to analyze the extent and nature of the evidence against the factors found at Section 33(c) of the Act. See M'Orr Pork (February 20, 1997), PCB 96-68, slip op. at 12; see also Sangamo Construction Company v. Pollution Control Board, 27 Ill. App. 3d 949, 953, 328 N.E.2d 571, 574-75 (4th Dist. 1975). These are the same factors that the Board must consider in determining the appropriate civil remedy for the violations found in this section. Those factors are:

i. the character and degree of injury to, or interference with the protection of the health, general welfare and physical property of the people;

ii. the social and economic value of the pollution source;

iii. the suitability or unsuitability of the pollution source to the area in which it is located, including the question of priority of location in the area involved;

iv. the technical practicability and economic reasonableness of reducing or eliminating the emissions, discharges or deposits resulting from such pollution source; and

v. any subsequent compliance. 415 ILCS 5/33(c) (1996).

The burden of proof lies with the complainant to show that, by a preponderance of the evidence, a "substantial interference" with the "enjoyment of life or property," excluding "trifling inconvenience, petty annoyance and minor discomfort" has occurred. See Processing and Books, Inc. v. Pollution Control Board, 64 Ill. 2d 68, 77, 351 N.E.2d 865, 869 (1976); see Incinerator, Inc.v. Pollution Control Board, 59 Ill. 2d 290, 297, 319 N.E.2d 794, 797 (1974); see also M'Orr Pork (February 20, 1997), PCB 96-68, slip op. at 14. The Board need not find against ESG Watts on each of the criteria of Section 33(c) in order to find a violation. See Wells Manufacturing Co. v. Pollution Control Board, 73 Ill. 2d 226, 233, 383 N.E.2d 148, 151 (1978).

Below is a discussion of each of the 33(c) factors as applied to the facts and circumstances in this matter to determine whether the odor from Taylor Ridge landfill constitutes an unreasonable interference with the life and property of the four landfill neighbors who testified in this proceeding.

Character and Degree of Injury. The Board considers the testimony provided by the witnesses as to the degree of odor to be convincing in its sincerity and detailed in its description. In weighing the character and degree of injury, in this case the injury of offensiveness, the Board has considered the following explicit record descriptions of the odor: "rotten garbage"; "raunchy smell"; "audible gas hole and odorous"; and "four-week old garbage sitting in the sun for weeks." Although the odors are worse sometimes than they are at other times, the testimony clearly showed that the odors consistently returned. The testimony of the four landfill neighbors, especially the log kept by Mr. Martens, show more than a mere "trifling inconvenience" but rather show an offensive, annoying nuisance. The odors affected the neighbors' way of life, and have caused them to close windows, stay inside, and turn on the air conditioning. The nuisance is made more onerous because the testimony clearly showed that the odors were not limited to landfill gas, but were the result of other manifestations of a poorly designed and maintained landfill: leachate and exposed refuse. On this factor, the Board finds that the character and degree of interference weighs in aggravation.

Social and Economic Value of the Pollution Source. For the same reasons set forth (see *infra* at 48-49) the Board finds that this factor weighs in aggravation.

Suitability of the Pollution Source to the Area. This factor requires the Board to look at the location of the landfill and determine its suitability to the area. Given the nuisance nature of the alleged air pollution violation, the Board will also look to the question of priority of location (basically, who was there first). See Decatur Auto Auction v. Macon County Farm Bureau (June 15, 1995), PCB 93-192, slip op. at 7, citing Wells Manufacturing, 73 Ill. 2d 226, 383 N.E.2d 148-152. In this case, the Taylor Ridge landfill has been in its present location for over 30 years, prior to at least three of the four neighbors who testified at hearing. While an important factor, the Board does not deem the question of priority of location dispositive on the question of nuisance. See Decatur Auto Auction v. Macon County Farm Bureau (June 15, 1995), PCB 93-192, slip op. at 7, citing Wells Manufacturing, 73 Ill. 2d 226, 383 N.E.2d 148-152. In this case, the neighbors had a right to expect that its landfill neighbor would be observing all relevant laws. If that were the case, the odor emanating from

the landfill would no doubt be much less than that experienced. Accordingly, the Board finds that this factor weighs neither in aggravation or mitigation.

Technical Practicability and Economic Reasonableness of Reducing the Emissions. In applying this factor, the Board must consider whether technically practicable and economically reasonable means of reducing or eliminating odor from the landfill were readily available to ESG Watts. See Incinerator, Inc., 59 Ill. 2d at 298, 319 N.E.2d at 798; Sangamo Construction Company, 27 Ill. App. 3d at 954-55, 328 N.E.2d at 575; see also M'Orr Pork (February 20, 1997), PCB 96-68, slip op. at 18-19. Certainly, as ESG Watts found in its eventual installation of the gas management system, a technically practicable and economically advantageous system for capturing methane emissions was available to reduce odors caused from those emissions. The Board agrees with the Agency that ESG Watts could have incorporated such technology sooner, given the serious characteristics of the odor and the dangerous nature of landfill gas. Further, landfill design has advanced considerably since the original permitting of Taylor Ridge landfill in the 1970's and with such advances have come technically practicable and economically reasonable solutions to dissipate leachate and to obviate problems with exposed refuse. ESG Watts has not incorporated long-term solutions to these problems at the Taylor Ridge landfill, which result in odorous situations. The Board finds that this factor weighs in aggravation.

Subsequent Compliance. Under this criterion for the Section 33(c) factors, the Board must examine whether ESG Watts has subsequently come into compliance with the requirements allegedly violated. See Dennis Manarchy v. JJJ Associates, Inc. (July 18, 1996), PCB 95-73, slip op. at 13. The installation of the gas management system will no doubt reduce the odors emanating from landfill gas, such that there may no longer be an unreasonable interference from that source. The fact that ESG Watts installed the system, whatever its motivation, weighs in mitigation. Nonetheless, ESG Watts' continued noncompliance with the statutory and regulatory provisions requiring good landfill management practices in the areas of leachate and refuse weighs in aggravation. Accordingly, the Board finds that this factor weighs neither in aggravation nor mitigation.

Having weighed the Section 33(c) factors as required, the Board finds that ESG Watts has caused air pollution in violation of Section 9(a) of the Act and Section 807.312 of the Board's Waste Disposal Regulations, by emitting odors which caused an unreasonable interference with the life and property of the neighbors of Taylor Ridge landfill, thereby causing air pollution as defined by the Act.

PENALTY ANALYSIS

Position and Arguments of the Parties

Complainant seeks to have the operating permits revoked for the Taylor Ridge landfill. In addition, the complainant seeks an order imposing monetary penalties ($700,000 if the permit is not revoked; $100,000 if the permit is revoked), awarding attorney fees and costs, and requiring ESG Watts to cease and desist from further violations. The complainant asserts

that revocation of operating permits "is the only remedy available that would ensure compliance with the Act and Board regulations." Comp. Br. at 38.

The complainant asks that the Board consider the past history of noncompliance in support of the "severe but warranted remedy." Comp. Br. at 38. Complainant argues that, while ESG Watts has been previously charged with high penalties, violations have not ceased. The complainant argues that the Board should look at the totality of the circumstances when fashioning the appropriate remedy in this case: ESG Watts' lack of a sig mod permit, ESG Watts' failure to adequately fund its financial assurance, and ESG Watts' lack of adequate operational controls. Complainant also points to the water and air pollution violations, the adverse effect on its neighbors, and the history of ESG Watts' previous violations.

Further, the Agency believes that ESG Watts' continued operation of the landfill poses a significant environmental threat:

> We are talking about issues that directly affect human health and the environment, issues such as gas leaving the landfill, run-on and runoff of contaminated water from the landfill, leachate control systems from the landfill, which can impact groundwater, and the groundwater assessment, which is necessary to determine whether the landfill is actually being operated as a sanitary landfill or an open dump . . . the longer that we let this facility operate, the more potential damage that is done." Testimony of Bill Child, chief of Bureau of Land. Tr. at 27.

While Mr. Child admitted that revocation of the landfill's permit is indeed a severe sanction, he believed that it was less severe than seeking a monetary penalty beyond the ability of the operator to recover. Tr. at 67. Alternatively, if the Board does not revoke the permits, then complainant requests that the Board provide the Agency with funding to maintain a full-time inspector who will oversee operations at Taylor Ridge landfill, in addition to assessing a $700,000 penalty.

While ESG Watts admits that while certain violations have occurred which may warrant a penalty, it argues that the proven violations are few. As to the lack of financial assurance fund, ESG Watts argues that ESG Watts' "failure to fully fund its closure trust at this time does not warrant a significant penalty." Further, ESG Watts argues that the $700,000 penalty proposed by complainant is unwarranted and not supportable based upon the facts of this matter. Resp. Br. at 29.

Permit Revocation

Section 33(b) of the Act specifically allows the Board to consider the revocation of a permit in fashioning an appropriate order:

> (b) Such order may include a direction to cease and desist from violations of the Act or of the Board's rules and regulations or of any permit or term or condition thereof, and/or the imposition by

> the Board of civil penalties in accord with Section 42 of this Act. The Board may also revoke the permit as a penalty for violation. (Emphasis added.) 415 ILCS 5/33(b) (1996).

Section 33(c) of the Act directs the Board to consider certain factors in making our orders and determinations. While the Board often applies the Section 33(c) to each and every alleged violation (as we have done with the air violation (see *supra* at 44-47), the Board does not do so in every case. Rather, the circumstances often require, as these circumstances do, an application of the factors to the totality of the alleged violations. Accordingly, the Board will weigh each of the factors as to the requested civil remedy of permit revocation.

Character and Degree of Injury to or Interference with the Protection of the Health, General Welfare, and Physical Property of the People. The testimony of the four neighbors to Taylor Ridge landfill serves to convince the Board that the leachate, exposed refuse, odor, runoff, and water violations that we found in this case are not minimal, as argued by the ESG Watts, but have seriously impacted neighboring property and, to a lesser extent, the livelihood of at least four citizens of the State. Further, the character of the potential injury to the people of this state as a result of ESG Watts' callous and long-term failure to provide financial assurance so that environmentally sound closure of this facility is guaranteed, is most severe. The Board concludes that this factor weighs in aggravation of the penalty to be imposed.

The Social and Economic Value of the Pollution Source. Normally, this factor weighs in favor of a respondent. Normally, a pollution source, albeit a "source" of pollution, has a social and economic value that must be weighed against the source's potential effect on the environment. Clearly, the source here has some economic value; certainly it employs the five individuals and two consultants who testified in our proceeding on its behalf. Also, as pointed out by ESG Watts, it provides fees to the county and the State for its continued operation.

However, it is one of three landfills in Rock Island County and the Board is not convinced by ESG Watts vice president's, Mr. Eilers, testimony that the closure of this landfill will result in a significant increase in rates because of heightened competition between the two remaining landfills. Tr. at 527-528. Moreover, such testimony is inconsistent with Mr. Eiler's prior testimony that ESG Watts' waste hauling parent company, ESG Watts Trucking, projects hauling much of the waste it normally would haul to Taylor Ridge landfill across the border to landfills in Iowa. Tr. at 526-527.

Further, Mr. Eilers' testimony of economic impact to the county is obviously not shared by Mr. Mehall. Although Mr. Mehall's budget is now about 50% funded as a result of ESG Watts tipping fees to the county, he believed that closure of the landfill would only result in a slight decrease "if any" on tipping fees. Tr. at 520. As Mr. Mehall testified, competition from revocation and closure of Taylor Ridge landfill might have some impact on hauling rates. However, he did not believe it would be "an extremely great impact at the present moment." His belief was based upon his observation of the consolidation which is going on in the waste industry in the area, particularly regarding Allied Waste Systems which owns the upper Rock Island County landfill. Tr. at 518.

Further, in considering the social and economic value of the pollution source, the Board would be remiss if it did not observe, as complainant requests, that a pollution source's value depends in part on its ability to achieve overall compliance with the Act. In this case, that social and economic value is undermined by ESG Watts' continued failure to make the technical improvements necessary to control leachate, runoff, and contamination, as well as underfunding of its financial assurance obligation. Yet, that company is owned by a parent company who has an approximately $1,000,000 loan outstanding to the single shareholder of these companies.

Further, while the methane recovery system, and the landfill gas itself, no doubt has substantial economic potential, that system is not owned by the owner/operator of the facility and, accordingly, should not be factored into our decision. For all the above reasons, the Board concludes that this factor weighs in aggravation of the penalty to be imposed.

The Suitability or Unsuitability of the Pollution Source to the Area. This factor requires the Board to look at the location of the Taylor Ridge landfill and determine its suitability to that area, including the question of priority of location. As to priority of location, Taylor Ridge landfill has been in its present location since the 1970's and certainly is incapable of moving. However, while it may have been a suitable location in the early days of landfills, record testimony shows that its location on a bluff near the Mississippi River is not an ideal location for a landfill and indeed its location may contribute to its problems with stormwater runoff and erosion. In the context of this case, and the requested permit revocation, the Board concludes that this factor weighs in aggravation of the penalty to be imposed.

Technical Practicability and Economic Reasonableness of Reducing or Eliminating Pollution. Complainant argues that compliance with the applicable rules and regulations would significantly reduce or eliminate the emissions, discharges and deposits from landfill operations. Complainant points out that compliance with the Board's regulations are technically practicable and compliance is being achieved at numerous landfills throughout the State. While compliance is costly, the expenses are reasonable in light of the income derived from landfill operations. Complainant argues that ESG Watts has generated substantial income while deferring, delaying, or avoiding compliance expenditures.

ESG Watts argues that the only emissions, discharges, or deposits alleged by complainant are stormwater runoff and landfill gas. ESG Watts argues that it cannot control storm events or landfill gas, but ESG Watts admits that measures can be taken to control these emissions. ESG Watts does not dispute the technical practicality or economic reasonableness of these measures, but suggests that such measures have been taken. With respect to landfill gas, ESG Watts has taken measures which it has found to be both technically practical and economically reasonable.

The Board agrees with complainant that measures to control pollution at landfills are both technically practicable and economically reasonable. The Board acknowledges that ESG

Watts has taken such measures as to landfill gas. However, the Board also acknowledges that, for years, instead of invoking such measures for the benefit of the environment, ESG Watts has deferred, delayed, and avoided expenditures, and continues to do so. The Board concludes that this factor weighs in aggravation of the penalty to be imposed.

Subsequent Compliance. ESG Watts argues that it "has been making significant strides towards compliance on all issues since at least 1993." Resp. Br. at 32. The complainant acknowledges that the landfill has recently made efforts at compliance, but declares that those efforts are "too little, too late." Comp. Br. at 7. While ESG Watts has indeed taken some steps to arrest runoff and leachate, through the perhaps conscientious efforts of the Taylor Ridge landfill employees, those efforts have only been short-term band-aid solutions. Long-term financial commitment is necessary to protect the environment from the problems of this landfill, and that commitment is lacking. This factor, subsequent "compliance" requires just that: compliance. Here, compliance is sporadic at best. On some issues, there is simply no compliance. Whatever compliance has been achieved, it has only been achieved after significant legal action was initiated by the State. The Board concludes that this factor weighs in aggravation of the penalty to be imposed.

Determination of Penalty

In fashioning any remedy, the Board must consider what action is best designed to achieve compliance with the Act. As to this landfill owner, administrative citations have not worked, circuit court actions have not worked, prior Board orders have not worked, and prior monetary penalties have not worked. We do not believe that complainant's alternative remedy, the hiring of an Agency employee for the sole purpose of overseeing operations at the Taylor Ridge landfill, will serve the purposes of the Act. Accordingly, we agree with complainant that the requested remedy, that of revocation of ESG Watts' operating permit for Taylor Ridge landfill, is warranted in this matter. Based upon our weighing of the Section 33(c) factors above, the Board finds that revocation of ESG Watts' permit to operate the Taylor Ridge landfill is the best remedy available to ensure compliance with the Act.

Complainant's requested monetary civil penalty, given the Board's decision to revoke ESG Watts' operating permit, is $100,000 (Comp. Br. at 49-50). The Board observes that given the number and duration of the violations determined herein, that amount at first blush appears to be well-within the statutory maximum of $50,000 per violation and $10,000 per day of violation as set forth in Section 42(a) of the Act. See comparatively, People v. Watts (February 5, 1998), PCB 96-233. The Board does not make its determinations, however, based upon "first-blush" opining but upon a well-considered analysis of the statutory factors found at Sections 33(c) and 42(h) of the Act. The Board has considered the factors set forth in Section 33(c) as those factors related to the question of permit revocation. The Board now considers the factors found at Section 42(h) of the Act as they relate to the $100,000 penalty requested by the complainant. Section 42(h) provides:

> [T]he Board is authorized to consider any matters of record in mitigation or aggravation of penalty, including but not limited to the following factors:

1. the duration and gravity of the violation;

2. the presence or absence of due diligence on the part of the vilator in attempting to comply with the requirements of this Act and regulations thereunder or to secure relief therefrom as provided by this Act;

3. any economic benefits accrued by the violator because of delay in compliance with requirements;

4. the amount of monetary penalty which will serve to deter further violations by the violator and to otherwise aid in enhancing voluntary compliance with this Act by the violator and other persons similarly subject to the Act; and

5. the number, proximity in time, and gravity of previously adjudicated violations of this Act by the violator. 415 ILCS 5/42(h) (1996).

Application of Section 42(h) Factors

The Duration and Gravity of the Violations. While many of these violations appear to have been occurring throughout the landfill's 30-year history, the Board carefully considered the arguments of ESG Watts and, accordingly, did not consider any of the evidentiary facts regarding water violations which could and should have been raised in the context of preceding circuit court actions. Rather, based upon the evidence, the Board considers the beginning of 1993 as a legitimate point of reference for most of the violations we have found herein. From that time until the filing of the complaint (and the motion to conform regarding the financial assurance violations), the Board estimates that a maximum penalty in the range of millions of dollars would be statutorily permissible.

Regarding gravity, the violations found herein, in quality and quantity, are grave indeed. The two violations the Board finds most grievous are ESG Watts' failure to provide financial assurance, and ESG Watts' violation of NPDES permit violations and Board water quality standards. ESG Watts' failure to provide the financial assurance necessary for an environmentally sound closure of this facility smacks of arrogant circumvention of legitimate State business requirements. As we stated earlier in this opinion, the funding of the financial assurance is an obligation every owner of a landfill in Illinois owes the taxpayers of this State and is part and parcel of the cost of doing business here. Further, ESG Watts' operation of a landfill with utter disregard for its NPDES monitoring and reporting obligations has contributed to the water pollution problems discussed herein. Section 42(b)(1) of the Act itself suggests the gravity the legislature suggested the Board import to NPDES violations. That section sets forth an additional statutory maximum in the amount of $10,000 per day for every

day of violation of Section 12(f), an NPDES permit condition, or a Board regulation implementing the NPDES program. We have found that such violations have occurred. These violations are weighty indeed.

The Board finds that this factor weighs in aggravation of the penalty to be imposed.

Due Diligence on the Part of the Violator. The Board appreciates the attempts made by ESG Watts' counsel to paint the respondent as making strides at compliance and, indeed, the Board recognizes that ESG Watts has appeared to attempt to solve various problems (especially regarding runoff and leachate) at the landfill. However, in the context of this case, the attempts of landfill employees (conscientious though they may be) to cap leachate seeps, plug gas holes, and put straw bales out to control runoff, are not the same thing as "due diligence" on the part of the violator. The violator here, ESG Watts, has not shown due diligence on the violations of consequence, nor has ESG Watts shown the long-term commitment necessary to solve the problems at the landfill.

The Board finds that this factor weighs in aggravation of the penalty to be assessed.

Economic Benefit. While this factor requires that the Board consider any economic benefits accrued by the violator because of a delay in compliance with the requirements, the Board could not possibly analyze the entirety of the economic benefit that has seeped into the corporate account of ESG Watts while leachate, contaminants, and litter have seeped into the land and water of the surrounding properties. The economic benefit ESG Watts incurred for its failure to fund the financial assurance fund alone is significant. Further, ESG Watts economically benefited for over a decade by avoiding its effluent monitoring and testing requirements. In the context of this case, economic benefits to ESG Watts from its non-compliance or delayed compliance were great.

The Board finds that this factor weighs in aggravation of the penalty to be assessed.

Monetary Penalty Which Will Serve to Deter Further Violations. Perhaps the most difficult question before the Board in this matter is what penalty dollar amount would best serve to deter further violations of the Act by this or other potential violators. Certainly, in similar cases, a higher dollar amount is more than justified. Indeed, the Board today decides another ESG Watts case, which deals with violations of the closed Viola landfill and assesses penalties in the amount of $680,200. See People v. ESG Watts (February 5, 1998), PCB 96-233. Also, we have pending before us People v. ESG Watts, PCB 96-237, which deals with violations at the Sangamon Valley landfill and also seeks penalties.

This case is different, however, because we are ordering a revocation of ESG Watts' permit to operate this landfill and, essentially, require that it cease operations there and go through appropriate closure procedures. In this case, we are persuaded by the testimony of Mr. Child that, in the context of this case, the State is more interested in protecting the environment than it is in assessing a penalty beyond the ability of the operator to recover.

The Board finds that this factor weighs in mitigation of the penalty we would normally assess.

Number, Proximity in Time, and Gravity of Previously Adjudicated Violations by the Violator. It is indeed uncanny that ESG Watts has actually been the recent subject of rather serious previously adjudicated violations, the most recent of which assessed a $60,000 penalty for, among other things, failing to timely file a sig mod application as required under the State's new federally-derived landfill program. See ESG Watts, PCB 94-127, *aff'd.*, 282 Ill. App. 3d 43, 668 N.E.2d 1015 (4th Dist. 1996). Further, it is unlikely that any one violator has been the subject of so many adjudicated violations. Indeed, it was ESG Watts' history of previously adjudicated violations which led the Board to uphold, in a case of first impression, the Agency's denial of waste stream permits for this very landfill. See ESG Watts, PCB 94-243, *aff'd.*, 286 Ill. App. 3d 325, 676 N.E.2d 299 (3rd Dist. 1997).

The Board finds that this factor weighs in aggravation of the penalty to be assessed.

Penalty Assessment

Based upon the above, the Board would find that a much greater penalty than that requested by complainant would be warranted upon the facts of this case. Nonetheless, the Board respects that the complainant has sought a more than reasonable monetary amount in this matter, given the Board's decision to revocate and given the uncertainty regarding the specific dollar amount which would most likely result in compliance with the Act and Board regulations. Accordingly, the Board orders, as requested by the complainant, a penalty in the amount of $100,000 to be paid to the Environmental Protection Trust Fund.

Attorney Fees

Section 42(f) of the Act allows the Board to award attorney fees if it finds that the violations are "willful, knowing or repeated." Various violations found herein would fall into one or more of those categories. Accordingly, attorney fees are allowed in this matter and are warranted. The complainant has provided an "Affidavit of Fees" which allege expenses in the amount of $26,567.01. The Board has reviewed that affidavit, and finds that it sets forth reasonable expenditures for the prosecution of this matter, at a rate found appropriate in prior Board cases. See People v. Watts (May 4, 1995), PCB 94-127, slip op. at 18. Accordingly, the Board orders $26,567 to be paid to the Hazardous Waste Fund.

ORDER

1. The Board finds that ESG Watts violated Sections 9(a), 12(a), 12(d), 12(f), 21 (d)(1), 21(d)(2), 21(o)(5), 21(o)(6), 21(o)(13), and 21.1(a) of the Act (415 ILCS 9(a), 12(a), 12(d), 12(f), 21 (d)(1), 21(d)(2), 21(o)(5), 21(o)(6), 21(o)(13), and 21.1(a) (1994)).

2. The Board finds ESG Watts in violation of 35 Ill. Adm. Code 302.203, 304.120(c), 304.124(a), 304.141(a), 305.102(b), 620.115, 620.301, 620.405, 807.305(a), 807.305(b), 807.305(c), 807.312, 807.313, 807.314(e), and 807.623. The Board finds ESG Watts in violation of various permit requirements including Special Condition 8 of Supplemental Permit No. 1991-292-SP, Special Conditions 2 and 18 of Supplemental Permit No. 1993-167-SP, and Special Conditions II.7, II.8 of Supplemental Permit No. 1996-087-SP.

3. The Board revokes ESG Watts' operating permit No. 1972-72-DE/OP. Accordingly, ESG Watts must not accept any more waste at the Taylor Ridge landfill.

4. ESG Watts must, in accordance with the supplemental permits issued by the Agency, perform the compliance requirements including the initiation and timely completion of closure and post-closure care, groundwater assessment monitoring, and gas and leachate extraction.

5. The Board orders ESG Watts to pay a penalty in the amount of $100,000, within 60 days of the date of this order. This payment must be made by certified check or money order payable to Treasurer of the State of Illinois, designated to the Environmental Protection Trust Fund, and should be sent by first class mail to:

   Illinois Environmental Protection Agency
   Fiscal Services Division
   1021 N. Grand Avenue East
   Springfield, IL 62702

6. The certified check or money order shall clearly indicate on it ESG Watts' federal employer identification number and that payment is directed to the Environmental Protection Trust Fund.

7. The Board orders ESG Watts to pay attorney fees and costs in the amount of $26,567 to the Attorney General's Office. Such payment shall be made within 60 days of the date of this order by certified check or money order payable to the Treasurer of the State of Illinois, designated for deposit to the Hazardous Waste Fund, and must be sent by first class mail to:

   Illinois Environmental Protection Agency
   Fiscal Services Division
   1021 N. Grand Avenue East
   Springfield, IL 62702

8. The certified check or money order shall clearly indicate on its face, the case name and number, ESG Watts' federal employer identification number and that payment is directed to the Hazardous Waste Fund.

9. Any such penalty not paid within the time prescribed shall incur interest at the rate set forth in Section 1003(a) of the Illinois Income Tax Act, (35 ILCS 5/1003 (1996)), as now or hereafter amended, from the date payment is due until the date payment is received. Interest shall not accrue during the pendancy of an appeal during which payment of the penalty has been stayed.

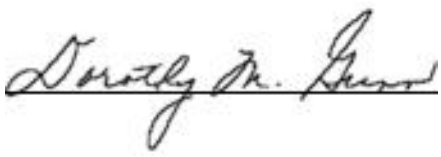
10. ESG Watts must cease and desist from violations of the Act and the Board's regulations.

IT IS SO ORDERED.

Board Member K.M. Hennessey abstained.

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1996)) provides for the appeal of final Board orders to the Illinois Appellate Court within 35 days of service of this order. Illinois Supreme Court Rule 335 establishes such filing requirements. See 145 Ill. 2d Resp. 335; see also 35 Ill. Adm. Code 101.246, 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 5th day of February 1998, by a vote of 5-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board