WEINBERG | RICHMOND
LLP

333 WEST WACKER DRIVE #1800
CHICAGO, ILLINOIS 60606-1288
TELEPHONE (312) 807-3800
FACSIMILE (312) 807-3903

EPA Region 5 Records Ctr.
264181

TIMOTHY RAMSEY
(312) 845-2507
TRAMSEY@WR-LLP.COM

March 3, 2005

VIA MESSENGER AND U.S. CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Thomas Krueger, Esq.
Associate Regional Counsel
U.S. Environmental Protection Agency
77 West Jackson Boulevard (C-14J)
Chicago, Illinois 60604-3590

Re: Ellsworth Industrial Park Site, Downers Grove, Illinois
Wisconsin Avenue Property L.L.C.

Dear Mr. Krueger:

1. We are representing Wisconsin Avenue Property L.L.C. (the "Company") with respect to environmental issues relating to the site at 2424 Wisconsin Avenue, Downers Grove, Illinois (the "2424 Site"). We understand that the 2424 Site is within the limits of the area designated by the U.S. Environmental Protection Agency ("EPA") as the Ellsworth Industrial Park Superfund Site (the "Ellsworth Site"). The Company received from Wendy Carney, of EPA's Remedial Response Branch #1, a Special Notice Letter dated December 28, 2004 (the "Special Notice Letter") stating, among other things, that (i) EPA has taken response actions at the Ellsworth Site pursuant to the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and (ii) EPA has identified the Company as a potentially responsible party ("PRP") under CERCLA with respect to the Ellsworth Site because it has reason to believe that the Company is an owner or operator of a portion of the Ellsworth Site or is a former owner or operator of a portion of the Ellsworth Site at the time of disposal of hazardous substances.

Background Information

2. The Company is providing this letter to EPA to respond to the Special Notice Letter and to establish that the Company is not a PRP with respect to the Ellsworth Site. Specifically, although the Company holds legal title to the 2424 Site at the present time, the Company is an "innocent purchaser" with respect to the 2424 Site pursuant to CERCLA Sections

101(35) and 107(b)(3). In that regard, we are enclosing herewith copies of the following documents for your information and consideration:

(a) Contract for Sale of Commercial Real Estate dated October 10, 1996 (the "Contract") between 2430 Wisconsin Company, as seller, and Roy Acquisition Corp., as nominee;

(b) Lease (short form) dated February 1, 1978 between Chicago Title and Trust Company, as Trustee under Trust No. 1069459 (the "Land Trust"), as landlord, and Bison Gear and Engineering Corporation ("Bison"), as tenant;

(c) Release Deed dated May 29, 1997 executed by Bison providing for release of Bison's interest in the Lease dated February 1, 1978 (mistakenly identified in the Release Deed as the Lease dated February 1, 1976);

(d) Articles of Incorporation for Bison and Annual Reports filed by Bison with the Illinois Secretary of State for the years 1978, 1987, 1996 and 1997;

(e) Trustee's Deed dated May 30, 1997 executed by the Land Trust in favor of the Company, as recorded with the Recorder of Deeds of DuPage County, Illinois as Document No. R97-077597;

(f) Partnership Minutes/Resolution of 2430 Wisconsin Company authorizing the sale of the 2424 Site as executed by Doris D. Stiehr and Ellen V. Diebel and authorizing Daniel H. Stiehr to execute documents on behalf of 2430 Wisconsin Company in connection with that sale transaction;

(g) FIRPTA Affidavit dated June 2, 1997 executed by 2430 Wisconsin Company (by Daniel H. Stiehr, Partner);

(h) Bill of Sale dated June 2, 1997 executed by 2430 Wisconsin Company, an Illinois general partnership (by Daniel H. Stiehr, Partner), transferring personal property at the 2424 Site to the Company;

(i) Phase I Environmental Assessment dated November 11, 1996 (the "Phase I Report") prepared by Carlson Environmental, Inc. ("Carlson");

(j) Limited Subsurface Soil Investigation dated December 12, 1996 (the "Phase II Report") prepared by Carlson;

(k) Affidavit dated February 25, 2005 executed by Jerry Schuchmann as Affiant regarding operations at the 2424 Site from June 2, 1997 to February, 2001;

(l) Affidavit dated February 25, 2005 executed by Eric Porter as Affiant regarding operations at the 2424 Site from February, 2001 to the present;

(m) Letter dated February 27, 2004 from Ross del Rosario of EPA to the Company requesting consent for access to the 2424 Site for environmental investigation;

(n) Consent for Access to Property dated April 13, 2004 as executed by the Company granting EPA and the State of Illinois access to the 2424 Site for environmental investigation; and

(o) Affidavit dated February 25, 2005 executed by Kenneth Morency, a member in the Company, to the effect that (i) the purchase price paid by the Company for the 2424 Site was not discounted because of any known environmental impairments and (ii) neither the Company nor any of its members had any specialized knowledge or experience concerning environmental risk analysis with respect to real estate at the time of the Company's acquisition of the 2424 Site in 1997.

3. We note the following matters in connection with the Company's interest in the 2424 Site and specifically in connection with its eligibility as an innocent purchaser under CERCLA:

(a) Based on Bison's corporate documents enclosed herewith as item no. 2(d), Bison was incorporated in 1960. At various times over the years, Robert Diebel, William Diebel and Daniel Stiehr were officers and directors of Bison.

(b) Bison leased the 2424 Site originally in 1978 pursuant to the Lease enclosed herewith as item no. 2(b) and continued to lease the 2424 Site until 1997 at which time the Lease was terminated as evidenced by the Release Deed enclosed as item no. 2(c). The Land Trust was the landlord under the Lease with Bison. Although we do not have at this time a copy of the trust agreement creating the Land Trust, we understand and assume that 2430 Wisconsin Company was the beneficiary of the Land Trust during the term (or at least some portion of the term) of Bison's occupancy of the 2424 Site because (i) 2430 Wisconsin Company entered into the Contract to sell the 2424 Site in 1997, (ii) the Land Trust executed the Trustee's Deed (item no. 2(e) above) conveying the 2424 Site to the Company and (iii) 2430 Wisconsin Company executed the FIRPTA Affidavit (item no 2(g) above) and the Bill of Sale (item no. 2(h) above), both of which were real estate closing documents executed when 2430 Wisconsin Company transferred the 2424 Site to the Company in 1997.[1]

---

[1] We note that Bison's response dated March 15, 2002 to EPA's information request under CERCLA Section 104(e) indicates that the owner of the 2424 Site was Diebel Manufacturing. The Company has no information concerning Diebel Manufacturing but notes that, if it was the previous owner of the 2424 Site,

(c) The real estate closing documents enclosed as item nos. 2(f), 2(g) and 2(h) evidence that 2430 Wisconsin Company was an Illinois general partnership and that the general partners included at a minimum Daniel Stiehr (a former officer and director of Bison) and Doris D. Stiehr (whom we assume was the wife or other close relation of Daniel Stiehr). We understand that Daniel Stiehr and Doris Stiehr are still alive and are living in Boulder, Colorado and/or Freeport, Illinois. At the present time the Company does not know if there were other general partners in 2430 Wisconsin Company, but the Company is making an effort to obtain that information. The Partnership Minutes for 2430 Wisconsin Company enclosed as item no. 2(f) were also executed by Ellen V. Diebel with the designation "POA" which we assume meant "power of attorney." We understand that Ellen V. Diebel is the wife or other close relation of Robert Diebel. We understand that Robert Diebel died approximately 4 years ago but that Ellen Diebel is still alive and resides in St. Charles, Missouri. Based on the information available to us at this time, it is possible that Ellen Diebel (or another Diebel individual) may also have been general partners in 2430 Wisconsin Company. As indicated above, the Company is making an effort to obtain information about the identity of all of the general partners in 2430 Wisconsin Company.

(d) Because Daniel Stiehr, Robert Diebel and William Diebel were at various times officers and directors of Bison, and because the general partners in 2430 Wisconsin Company included Daniel Stiehr and one of more Diebel individuals, it appears that 2430 Wisconsin Company was an affiliate of Bison that was owned and controlled by officers and directors of Bison and organized to own the 2424 Site and lease it to Bison for its manufacturing operations.

(e) On October 10, 1996, 2430 Wisconsin Company entered into the Contract to sell the 2424 Site to Roy Acquisition Corp., as nominee. Roy Acquisition Corp. acted as nominee for the Company, and the Company actually acquired the 2424 Site at the real estate closing pursuant to the Contract, as evidenced by the real estate closing documents enclosed herewith as item nos. 2(e), 2(g) and 2(h).

(f) 2430 Wisconsin Company made several environmental representations and warranties in Section 7.08 of the Contract, including without limitation representations and warranties that (i) the 2424 Site was then and would remain through closing in compliance with various environmental laws including CERCLA, the Resource Conservation and Recovery Act, the Federal Water Pollution Control Act and all other federal, state and local environmental laws, and (ii) there was no "release" (as defined in CERCLA) or, to Seller's knowledge,

---

it would have transferred its interest to 2430 Wisconsin Company because 2430 Wisconsin Company was the seller in the 1996 and 1997 sale transaction referred to below.

threat of a "release" of any Hazardous Substance on, from or under the 2424 Site. Pursuant to Section 11.04 of the Contract, all of the representations and warranties of 2430 Wisconsin Company were remade as of the closing of the real estate transaction.

(g) Shortly after the execution of the Contract (and before the real estate closing pursuant to that Contract), the Company obtained from Carlson the Phase I Report dated November 11, 1996 (item no. 2(i) above) with respect to the 2424 Site. Carlson stated in the Phase I Report that its work complied with the American Society for Testing and Materials ("ASTM") standard that was in effect at that time (ASTM Standard E 1527-94).[2] Carlson stated in the Phase I Report that it identified no "recognized environmental conditions" (as defined in the ASTM Standard E 1527) at the 2424 Site except for some areas of surficial staining (i) along the south wall of the loading dock where the air compressor was located and (ii) outside the north wall of the site building along the north wall of the warehouse area and loading dock. Carlson also noted that there was a leaking underground storage tank ("LUST") on the site occupied by Burnside Construction Company immediately to the east of the 2424 Site. Carlson recommended in the Phase I Report that limited subsurface soil investigations be conducted in the areas of the surficial staining and in the portion of the 2424 Site near the LUST at the adjacent Burnside Construction Company site in order to determine whether there was any adverse environmental impact to the 2424 Site related to those matters.

(h) In order to investigate further the concerns identified by Carlson in the Phase I Report, the Company obtained (before the real estate closing under the Contract) the Phase II Report dated December 12, 1996 from Carlson (item no. 2(j) above). The Phase II Report indicates that Carlson took soil samples from (i) the location of the air compressor (2 samples), (ii) the north wall of the building (2 samples) and (iii) near the eastern boundary of the 2424 Site closest to the two gasoline pump islands associated with the LUST at the adjacent Burnside Construction Company site (1 sample). Carlson stated in the Phase II Report that test results from these soil samples indicated no exceedances over the applicable Tier 1 standards for commercial/industrial properties under the TACO (Tiered Approach to Corrective Action Objectives) regulations promulgated by the Illinois Pollution Control Board at 35 Ill. Admin. Code Part 742.

(i) Following the Company's acquisition of the 2424 Site in 1997, the Company leased the 2424 Site to International Piping Services Co. ("IPSCO"), which was

---

[2] The ASTM Standard E 1527-97 was not published until May, 1997, which was after the preparation of the Phase I Report.

an affiliate of the Company and engaged in the piping supply business including light machining and welding operations at the 2424 Site. The Affidavit enclosed herewith as item no. 2(k) has been executed by Jerry Schuchmann, who was formerly the Manager of Manufacturing for IPSCO and worked at the Site from June 2, 1997 to February 2001. Mr. Schuchmann states in that Affidavit that operations at the 2424 Site between June 2, 1997 and February 2001 were light industrial operations, that his job responsibility as Manager of Manufacturing would have brought any hazardous substance releases during that time period to his attention and that he had no knowledge or notice of any hazardous substance releases at the 2424 Site during that time period.

(j) The Affidavit enclosed herewith as item no. 2(l) has been executed by Eric Porter, who has worked at the Site as Illinois Branch Manager for Flowserve Corporation from February 2001 to the present. Mr. Porter states in that Affidavit that operations at the Site from February 2001 to the present have consisted only of warehousing of piping components, that his job as Illinois Branch Manager would have brought any hazardous substance releases during that time period to his attention and that he has no knowledge or notice that any hazardous substance releases have occurred on the 2424 Site during that time period.

(k) The Company became aware for the first time of the CERCLA activities relating to the Ellsworth Site when it received the letter dated February 27, 2004 from Mr. del Rosario of EPA (item no. 2(m) above). EPA indicated in that letter that it was requesting access to the 2424 Site pursuant to its authority under CERCLA. The Company granted access to EPA pursuant to the Consent for Access to Property (item no. 2(n) above) on April 13, 2004. Pursuant to that grant of access, EPA's contractor Weston Solutions, Inc. ("Weston") performed subsurface investigation of the 2424 Site. EPA subsequently furnished to the Company a copy of the Data Evaluation Summary Report (Revision 1) dated August 3, 2004 prepared by Weston (the "Weston Report") that includes information about subsurface investigations by Weston at the 2424 Site and at several other parcels in the Ellsworth Site. The Weston Report indicates that Weston detected some hazardous substances in excess of EPA's screening criteria in soil and groundwater at some of the subsurface testing locations on the 2424 Site. As a general matter, the exceedances identified by Weston at the 2424 Site were at depths greater than those investigated by Carlson as described in the Phase II Report. We note in this regard that the purpose of Carlson's subsurface investigation at the 2424 Site as reflected in the Phase II Report was to investigate surficial stained soils near the building and possible migration of petroleum hydrocarbons from the LUST on the adjacent site, so sampling at greater depths in the areas of surficial staining was not considered appropriate given the

information that was available when the investigations reflected in the Phase I Report and Phase II Report were conducted.

(l) The Weston Report contains (in Section 3, page 13) the following background information concerning the 2424 Site:

> "The [2424 Site] is currently occupied by Flowserve which has been present there for over 4 years. The [2424 Site] was previously occupied by [Bison], a manufacturer of gears, shafts, and aluminum castings used for gear and electric motors. The response to the U.S. EPA 104(e) indicates [Bison] leased the [2424 Site] from 1976 to 1997. The company [Bison] used 1,1,1-TCA (in waste petroleum naphtha) to clean gears and for a cutting process in a closed loop system. In 1986, approximately 2,200 gallons of waste petroleum naphtha was generated. Solvents were stored in drums. Cutting oil was drained from machinery once or twice a year and removed by Beaver Oil. Waste naphtha was disposed of by Safety Kleen. The company [Bison] indicated they stopped using solvents in the late 1980s or early 1990s. A parts washing machine was purchased in 1986 to reduce the amount of waste petroleum naphtha generated. An IEPA inspection in 1991 noted petroleum stained soil at the property adjacent to a drum storage area. Contaminated soil was removed in May 1991 under IEPA oversight. A June 1991 site inspection by the DuPage County Department of Environmental Concerns found the [2424 Site] to be in compliance with applicable environmental regulations."

(m) Based on the information provided by Bison as reflected in the Weston Report, it is clear that Bison's industrial operations (unlike those of IPSCO and Flowserve) involved substantial quantities of 1,1,1-TCA, waste petroleum naphtha and other hazardous substances as needed for Bison's manufacturing of gears, shafts and castings for electric motors. This information also indicates that contaminated soils were removed from the 2424 Site in 1991. However, 2430 Wisconsin Company failed to make a disclosure in the Contract concerning that 1991 soil removal activity; in fact, the representations and warranties by 2430 Wisconsin Company were to the effect that no hazardous substance releases had occurred at the 2424 Site.

(n) If in fact Bison released hazardous substances at the 2424 Site from its operations, those releases occurred before the date of the Company's acquisition of the 2424 Site. In making this observation, the Company reserves all of its rights, and the Company does not admit or concede that hazardous substances have been released at the 2424 Site. However, the Company notes that, if any such hazardous substances were released at the 2424 Site, they were released by Bison,

and for that reason EPA should be looking to Bison (as the operator of the 2424 Site at the time any such hazardous substances were released) and to the owners of the 2424 Site at the time such releases occurred (*i.e.*, 2430 Wisconsin Company and its general partners and, based on Bison's response to EPA's information request, possibly Diebel Manufacturing). EPA should not look to the Company as a PRP because of its status as an "innocent purchaser" as described in this letter.

Requirements for Innocent Purchaser Status

4. The requirements for "innocent purchaser" status under CERCLA are that (i) the purchaser must, before acquiring the facility, perform "all appropriate inquiry" with respect to the facility and not know or have reason to know that hazardous substances which are the subject of the CERCLA release were disposed of on or at the facility [CERCLA Section 101(35)], (ii) the purchaser must acquire the facility after the hazardous substances are disposed of at the facility [CERCLA Section 101(35)(A)], (iii) the purchaser must provide cooperation, assistance and facility access to the persons conducting response actions at the facility [CERCLA Section 101(35)(A)], (iv) the purchaser must comply with any land use restrictions established or relied on in connection with the response action at the facility [CERCLA Section 101(35)(A)], (v) the party must take reasonable steps to stop any continuing release, prevent any threatened future release and prevent or limit any human, environmental or natural resource exposure to any previously released hazardous substance [CERCLA Section 101(35)(B)(i)], and (vi) the party must exercise due care with respect to the hazardous substance concerned and take precautions against foreseeable acts or omissions of any third party [CERCLA Section 107(b)(3)]. Each of the foregoing requirements for innocent purchaser status with respect to the Company and the 2424 Site is addressed in the following paragraphs.

All Appropriate Inquiry and Knowledge of the Release

5. The standards for the conduct of "all appropriate inquiry" are set forth in CERCLA Section 101(35)(B), which provides, among other things, that the party must inquire into the previous ownership and uses of the facility in accordance with generally accepted good commercial and customary standards and practices. CERCLA Section 101(35)(B)(ii) requires EPA to promulgate regulations establishing standards for the conduct of "all appropriate inquiry," but EPA has not yet promulgated those regulations. However, CERCLA Section 101(35)(B)(iv) establishes interim standards for the conduct of "all appropriate inquiry" until EPA issues regulations pursuant to CERCLA Section 101(35)(B)(ii). The interim standards in CERCLA Section 101(35)(B)(iv)(1) apply with respect to property purchased before May 31, 1997, and the interim standards in CERCLA Section 101(35)(B)(iv)(2) apply with respect to property purchased on or after May 31, 1997. The Company believes that the interim standards in CERCLA Section 101(35)(iv)(1) apply to its acquisition of the 2424 Site. In this regard, please note that, although the actual transfer of title [as evidenced by the recordation of the Trustee's Deed enclosed herewith as item no. 2(e)] occurred on June 2, 1997, the Contract was

executed on October 10, 1996. The Company believes that, for purposes of the interim standards, it "purchased" the 2424 Site when the Contract was executed in 1996, with the effect that the interim standards in CERCLA Section 101(35)(B)(iv)(1) apply.

6. CERCLA Section 101(35)(B)(iv)(1) sets forth the factors that are relevant to determine whether a party conducted "all appropriate inquiry" with respect to a facility purchased before May 31, 1997. In that regard, the following information regarding the Company's acquisition of the 2424 Site is responsive to each of the requirements set forth in CERCLA Section 101(35)(B)(iv)(1):

(a) Any specialized knowledge or experience on the part of the defendant (CERCLA Section 101(35)(B)(iv)(1)(aa). The Affidavit enclosed herewith as item no. 2(o) includes information that neither the Company nor its members have any specialized knowledge or experience with respect to environmental matters governed by federal or state environmental laws.

(b) The relationship of the purchase price to the value of the property, if the property was not contaminated. We understand this requirement to mean that a party's purchase of a facility at a significant discount from the value that it would have if it were not contaminated may constitute evidence of the purchaser's knowledge of contamination. In this regard, the Affidavit enclosed herewith as item no. 2(o) states that the Company did not purchase the 2424 Site at a discount from market value based on any contamination of the 2424 Site.

(c) Commonly known or reasonably ascertainable information about the property. The Phase I Report prepared by Carlson identifies the commonly known or reasonably ascertainable information about the 2424 Site, including the results of physical inspections of the 2424 Site, searches of publicly available environmental databases, requests for Sanborn fire insurance maps (none available for the 2424 Site), interviews with the manufacturing manager for Bison (that was occupying the 2424 Site at the time of the Phase I Report), review of aerial photographs and review of USGS topographic maps.

(d) The obviousness of the presence or likely presence of contamination at the property. Although the Phase I Report indicates that Carlson observed surficial staining in two areas near the building on the 2424 Site, Carlson subsequently tested the soils in those areas and concluded that there was no contamination in excess of the applicable TACO remediation objectives in those areas. In this circumstance, there was no evidence that the soils and groundwater at deeper depths at the 2424 Site were contaminated.

(e) The ability of the defendant to detect the contamination by appropriate inspection. Based on the information available to the Company when it was in the process of acquiring the 2424 Site (the representations and warranties of 2430 Wisconsin Company in the Contract and the information in the Phase I Report and the Phase II Report), there was no reason for the Company to know of or suspect the existence of any contamination at deeper levels than those investigated by Carlson. As such, the Company conducted environmental investigations of a type and scope that were appropriate at the time given the information that was reasonably available about the 2424 Site at the time.

Based on the foregoing, the Company conducted "all appropriate inquiry" of the 2424 Site before it acquired it as determined under the interim standards in CERCLA Section 101(35)(B)(iv)(1).

7. As noted above, the Company believes that the interim standards in CERCLA Section 101(35)(B)(iv)(1) apply because the date for its "purchase" of the 2424 Site should be the date of the execution of the Contract (October 10, 1996), not the date of the actual transfer of title to the Company (June 2, 1997). However, if it is determined that the Company's "purchase" occurred on June 2, 1997, then the interim standards in CERCLA Section 101(35)(B)(iv)(2) would apply. The Company does not admit or concede that its "purchase" of the 2424 Site occurred after May 31, 1997 so as to cause the interim standards in CERCLA Section 101(35)(B)(iv)(2) to apply. However, the Company notes that, even if those interim standards do apply, the Company satisfied the requirements of those interim standards as well. Specifically, the Phase I Report complies with the ASTM Standard E 1527-94, as stated explicitly by Carlson on pages 1 and 16 of the Phase I Report. Further, even though the interim standards in CERCLA Section 101(35)(B)(iv)(2) refer to the ASTM Standard E 1527-97, the Company believes that the Phase I Report complies with those interim standards because the ASTM Standard E 1527-94 is substantially similar to ASTM Standard E 1527-97. In addition, it would have been a practical impossibility for the Company to comply specifically with ASTM Standard E 1527-97 because (i) the Contract was executed, and the Phase I Report was prepared, in 1996, (ii) the ASTM Standard E 1527-97 was not published until May, 1997, and (iii) it would have been practically impossible and unreasonable for the Company to obtain a new Phase I Report in May 1997 (*i.e.*, shortly before the real estate closing on June 2, 1997) after the Company had already obtained the Phase I Report and the Phase II Report.

8. CERCLA Section 101(35)(B)(i) provides that the purpose of the "all appropriate inquiry" is to establish under CERCLA Section 101(35)(A)(i) that, at the time of the party's acquisition of the facility, the party did not know and had no reason to know that any hazardous substance which is the subject of the release or threatened release was disposed of on, in or at the facility. In this regard, the Company's investigations of the 2424 Site as reflected in the Phase I Report and Phase II Report did not reveal any exceedances over the applicable TACO standards. These investigations, together with the Company's reliance on the contractual representations

and warranties of 2430 Wisconsin Company, establish that the Company satisfied this requirement.

Acquisition of the Facility After the Hazardous Substance Release

9. CERCLA Section 101(35)(A)(i) also provides that a party eligible for "innocent purchaser" status must acquire the facility after the disposal or placement of the hazardous substances on, in or at the facility. In this regard, the matters described in paragraphs 3(l), 3(m) and 3(n) of this letter above establish that, if hazardous substances were released or disposed of at the 2424 Site, the Company acquired the 2424 Site after any such release or disposal.

Cooperation, Assistance and Access

10. CERCLA Section 101(35)(A) requires that a party eligible for "innocent purchaser" status must provide cooperation, assistance and facility access to the persons that are authorized to conduct response actions at the facility (including the cooperation and access necessary for the installation, integrity, operation and maintenance of any complete or partial response action at the facility). In this regard, the Company has already provided access to the 2424 Site to EPA and Weston in response to EPA's request, as evidenced by the Consent to Access to Property enclosed herewith as item no. 2(n). No other cooperation, assistance or access has been requested from the Company with respect to any response actions. The Company has advised that it intends to provide reasonable cooperation, assistance and access in connection with any future response actions at the 2424 Site.

Compliance With Land Use Restrictions

11. CERCLA Section 101(35)(A) requires that a party is eligible for "innocent purchaser" status only if the party "is in compliance with any land use restrictions established or relied on in connection with the response action at a facility, and does not impede the effectiveness or integrity of any institutional control employed at the facility in connection with a response action." In this regard, the Company is not aware of any land use restrictions or institutional controls at the 2424 Site in connection with the response actions at the Ellsworth Site, so this requirement is not applicable.

Reasonable Steps Regarding Future Releases and Exposures

12. CERCLA Section 101(35)(B)(i)(II) requires that a party eligible for "innocent purchaser" status must take reasonable steps to stop any continuing release, prevent any threatened future release and prevent or limit any human, environmental, or natural resource exposure to any previously released hazardous substance. In this regard, the Company notes that (i) Flowserve (the current tenant of the Property) is required under its Lease to comply with all environmental laws in its operations at the 2424 Site, (ii) there is no evidence of any continuing release or future threatened future release of hazardous substances at the 2424 Site, (iii) the

Company has notified Flowserve in writing of the subsurface conditions reflected in the Weston Report and has instructed Flowserve not to conduct any digging or excavation at the 2424 Site without notice to the Company and implementation of procedures to protect workers, and (iv) no additional steps are needed at this time to prevent or limit any exposure to any previously released hazardous substances because the subsurface conditions identified by Weston at the 2424 Site are several feet beneath ground surface, evidencing that no exposures are expected.

Exercise of Due Care

13. CERCLA Section 107(b)(3) requires that a party eligible for "innocent purchaser" status must exercise due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts and circumstances and take precautions against foreseeable acts or omissions of any third party and the consequences that could reasonably result from such third party's acts or omissions. The requirements in CERCLA Section 107(b)(3) relate to the acts or omissions of a third party who caused the hazardous substance release. In this matter, although the Company does not admit or concede that any hazardous substances were released at the 2424 Site, the Company notes that, if any such hazardous substances releases did occur, they occurred as a result of Bison's operations before the Company acquired the 2424 Site. As such, the Company could not have taken any actions to prevent any releases by Bison at the 2424 Site before the Company acquired the 2424 Site. In addition, the Company has provided cooperation and access to EPA and Weston to conduct subsurface investigations of the 2424 Site and, as noted above, intends to provide reasonable cooperation, assistance and access in connection with any future response actions at the 2424 Site.

Conclusion

14. Based on the foregoing, the Company believes that it has responded favorably and definitively to each of the elements required to establish its status as an "innocent purchaser" with respect to the 2424 Site. As such, the EPA should not look to the Company as a PRP with respect to the 2424 Site and should instead look to Bison and the owners of the 2424 Site at the time of any such releases caused by Bison (*i.e.*, 2430 Wisconsin Company and its general partners and possibly Diebel Manufacturing) as the PRPs with respect to the 2424 Site. We would appreciate your response to this letter at your earliest convenience, confirming EPA's concurrence that the Company is an "innocent purchaser" with respect to the 2424 Site.

Very truly yours,

Timothy Ramsey

Enclosures

78-15099

CHICAGO-DU PAGE CO. DIVN.

LEASE

For and in consideration of One Dollar ($1.00) and other valuable considerations paid and to be paid by BISON GEAR & ENGINEERING CORPORATION (hereinafter referred to as Lessee) to CHICAGO TITLE AND TRUST COMPANY, as Trustee under Trust Agreement dated March 23, 1977, known as Trust #1069459 (hereinafter referred to as Lessor), Lessor does lease and demise unto Lessee and Lessee does lease and take from Lessor, upon the terms and conditions and subject to the limitations more particularly set forth in a certain lease agreement between Lessor and Lessee, dated January 1, 1978, for the premises situated in the Village of Downers Grove, DuPage County, Illinois, and known as 2430 Wisconsin Avenue, which premises are legally described to-wit:

> Lot 4 of Frank Lopata's Resubdivision of Lots 10, 11 and 12 in the Resubdivision of Lots 8 to 13 inclusive in Ellsworth Park Unit No. 3, and Lot 24 in Ellsworth Park Unit No. 5, being a Subdivision situated in part of the southwest quarter and the southeast quarter of Section 12, Township 33 North, Range 10, East of the Third Principal Meridian, in DuPage County, Illinois.

The term of the lease is 28 years commencing January 1, 1978 and ending on December 31, 2006. This short form is not a complete summary of the lease; provisions in the short form shall not be used in interrupting the lease provisions. In the event of conflict between the short form and unrecorded lease, the unrecorded lease shall control.

In Witness Whereof, Lessee and Lessor have executed this short form on [illegible], 1978.

CHICAGO TITLE AND TRUST COMPANY,
as Trustee aforesaid

by [illegible]
ASST. Vice President

Attest:

[illegible]
Assistant Secretary

This instrument was prepared by Jerry C. Lagerquist, One First National Plaza, Chicago, Illinois 60603

585388

14-299

SCHUMACHER JONES VALLEY, KELLY & OLSON

It is expressly understood and agreed by and between the parties hereto, anything herein to the contrary notwithstanding, that each and all of the warranties, indemnities, representations, covenants, undertakings and agreements herein made on the part of the lessor while in form purporting (except as herein otherwise expressed) to be the warranties, indemnities, representations, covenants, undertakings and agreements of the lessor are nevertheless each and every one of them made and intended not as personal warranties, indemnities, representations, covenants, undertakings and agreements by the lessor or for the purpose or with the intention of binding said lessor personally but are made and intended for the purpose of binding only that portion of the trust property specifically leased hereunder, and this lease is executed and delivered by said lessor not in its own right, but solely in the exercise of the powers conferred upon it as such Trustee; that no duty shall rest upon lessor to sequester the trust estate or the rents, issues and profits arising therefrom, or the proceeds arising from any sale or other disposition thereof, and that no personal liability or personal responsibility is assumed by nor shall at any time be asserted or enforcible against the Chicago Title and Trust Company or any of the beneficiaries under said Trust Agreement, on account of this lease or on account of any warranty, indemnity, representation, covenant, undertaking or agreement of the said lessor in this lease contained, either expressed or implied, all such personal liability, if any, being expressly waived and released by the lessee herein and by all persons claiming by, through or under said lessee.

F.531 R.1/76

78-15199

78-15699

BISON GEAR & ENGINEERING CORPORATION

By William Diebel
President

Attest:

Robert W. Diebel
Secretary

STATE OF ILLINOIS)
COUNTY OF C O O K) SS.

I, the undersigned, a Notary Public in and for the County and State aforesaid, DO HEREBY CERTIFY, that the above named Assistant Vice President and Assistant Secretary of the CHICAGO TITLE AND TRUST COMPANY, Grantor, personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such Assistant Vice President and Assistant Secretary respectively, appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act and as the free and voluntary act of said Company for the uses and purposes therein set forth; and the said Assistant Secretary then and there acknowledged that said Assistant Secretary, as custodian of the corporate seal of said Company, caused the corporate seal of said Company to be affixed to said instrument as said Assistant Secretary's own free and voluntary act and as the free and voluntary act of said Company for the uses and purposes therein set forth.

Given under my hand and Notarial Seal this 4th day of February, 1978.

Monica Sandoval
Notary Public

STATE OF ILLINOIS)
COUNTY OF C O O K) SS:

I, the undersigned, a Notary Public in and for and residing in said County, in the State aforesaid, DO HEREBY CERTIFY THAT William Diebel, President of BISON GEAR & ENGINEERING CORPORATION and Robert W. Diebel, Secretary of said Company, personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such President and Secretary, respectively, appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act and as the free and voluntary act of said Company, for the uses and purposes therein set forth; and the said Secretary then and there acknowledged that said Secretary as custodian of the corporate seal of said Company, did affix the corporate seal of said Company to said instrument as said Secretary's own free and voluntary act and as the free and voluntary act of said Company, for the uses and purposes therein set forth.

Given under my hand and Notarial Seal this 4th day of _____, 1978.

Notary Public

RELEASE DEED

MAIL TO: William J. Ulrich, Jr.
Hinshaw & Culbertson, Suite 415
4343 Commerce Ct., Lisle, IL 60532

NAME & ADDRESS OF PREPARER:
William J. Ulrich, Jr.
Hinshaw & Culbertson, Suite 415
4343 Commerce Ct., Lisle, IL 60532

RECORDER'S STAMP

Know All Men by These Presents, That BISON GEAR AND ENGINEERING CORPORATION

of the County of DuPage and State of Illinois for and in consideration of one dollar, and for other good and valuable consideration, the receipt whereof is hereby confessed, do hereby remise, convey, release and quit-claim unto CHICAGO TITLE AND TRUST COMPANY, as Trustee under Trust Agreement dated March 23, 1977, known as Trust #1069439

of the County of and State of Illinois all right, title, interest, claim or demand whatsoever said corporation may have acquired in, through or by a certain Lease, bearing date the 1st day of February, A.D. 1976, and recorded in the Recorder's Office of DuPage County, in the State of Illinois, as Document No. R78 15099 to the premises therein described, situated in the County of DuPage, State of Illinois as follows, to wit:

Lot 4 of Frank Lopata's Resubdivision of Lots 10, 11 and 12 in the Resubdivision of Lots 8 to 13 inclusive in Ellsworth Park Unit No. 3 and Lot 24 in Ellsworth Park Unit No. 5, being a Subdivision situated in part of the Southwest Quarter and the Southeast Quarter of Section 12, Township 38 North, Range 10, East of the Third Principal Meridian, in DuPage County, Illinois.

together with all the appurtenances and privileges thereunto belonging or appertaining.

WITNESS hand and seal this 29 day of May, 1997

FOR THE PROTECTION OF THE OWNER, THIS RELEASE SHALL BE FILED WITH THE COUNTY RECORDER IN WHOSE OFFICE THE MORTGAGE OR DEED OF TRUST WAS FILED.

BISON GEAR & ENGINEERING CORPORATION

By: Ronald D. Bullock
Its President

Attest: [illegible]
Its Asst Secretary

"OFFICIAL SEAL"
MICHELLE TRUSS
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 6/21/00

Michelle Truss

CORPORATION ACKNOWLEDGMENT

STATE OF ILLINOIS)
) SS:
COUNTY OF DU PAGE)

On this 29TH day of May, 1997, the officer, personally appeared before me and acknowledged himself to be the PRESIDENT of **BISON GEAR & ENGINEERING CORPORATION**, a corporation, and that he, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Kathy G. Meeker-Wille

IMPRESS SEAL HERE

Certificate Number 46885

STATE OF ILLINOIS

OFFICE OF THE SECRETARY OF STATE

To all to whom these Presents Shall Come, Greeting:

Whereas, *Articles of Incorporation duly signed and verified of* BISON GEAR & ENGINEERING CORPORATION *have been filed in the Office of the Secretary of State on the* 25th *day of* January *A. D. 19*60*, as provided by "THE BUSINESS CORPORATION ACT" of Illinois, in force July 13, A. D. 1933.*

Now Therefore, I, CHARLES F. CARPENTIER, *Secretary of State of the State of Illinois, by virtue of the powers vested in me by law, do hereby issue this certificate of incorporation and attach thereto a copy of the Articles of Incorporation of the aforesaid corporation.*

In Testimony Whereof, *I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, Done at the City of Springfield this* 25th *day of* January *A.D. 19*60 *and of the Independence of the United States the one hundred and* 84th.

Charles F. Carpentier

(SEAL)

SECRETARY OF STATE.

FORM B

BEFORE ATTEMPTING TO EXECUTE THESE BLANKS BE SURE TO READ CAREFULLY THE INSTRUCTIONS ON THE BACK THEREOF.

(THESE ARTICLES MUST BE FILED IN DUPLICATE)

(Do not write in this space)

Date Paid 1-25-60
Initial License Fee $ 10.00
Franchise Tax $ 15.00
Filing Fee $ 20.00
Clerk

124 30

STATE OF ILLINOIS,
Du Page COUNTY } ss.

To CHARLES F. CARPENTIER, Secretary of State:

We, the undersigned,

Name	Number	Street	Address City	State
Bertel S. Nelson	341 East Ravine Road,		Hinsdale,	Illinois
John D. Bregin	6024 South Fairfield Ave.		Chicago 29,	Illinois
Jane L. Nelson	341 East Ravine Road		Hinsdale,	Illinois
Ann Bregin	6024 South Fairfield Ave.		Chicago 29,	Illinois

being natural persons of the age of twenty-one years or more and subscribers to the shares of the corporation to be organized pursuant hereto, for the purpose of forming a corporation under "The Business Corporation Act" of the State of Illinois, do hereby adopt the following Articles of Incorporation:

ARTICLE ONE

The name of the corporation is: BISON GEAR & ENGINEERING CORPORATION

ARTICLE TWO

The *address* of its initial registered office in the State of Illinois is: 341 East Ravine Road

Street, in the City of Hinsdale (-) (Zone) County of Du Page and

the *name* of its initial Registered Agent at *said address* is: Bertel S. Nelson

ARTICLE THREE

The duration of the corporation is: PERPETUAL

PAID
JAN 25 1960
Charles F. Carpentier
Secretary of State

3

ARTICLE FOUR

The purpose or purposes for which the corporation is organized are:

(1) Manufacture and marketing of semi-finished, finished, and fabricated metal, plastic, etc., products.

(2) Acquiring, owning, using, conveying, and otherwise disposing of and dealing in personal property or any interest therein.

~~(3) Performing engineering, design, drafting, and inspection services in the capacity of principal and/or agent.~~

deleted 1/23/60 Bylaw

4

ARTICLE FIVE

PARAGRAPH 1: The aggregate number of shares which the corporation is authorized to issue is 20,000, divided into One (1) classes. The designation of each class, the number of shares of each class, and the par value, if any, of the shares of each class, or a statement that the shares of any class are without par value, are as follows:

Class	Series (If any)	Number of Shares	Par value per share or statement that shares are without par value
Common	--	20,000	$1.00

PARAGRAPH 2: The preferences, qualifications, limitations, restrictions and the special or relative rights in respect of the shares of each class are:

Not Applicable

ARTICLE SIX

The class and number of shares which the corporation proposes to issue without further report to the Secretary of State, and the consideration (expressed in dollars) to be received by the corporation therefor, are:

Class of shares	Number of shares	Total consideration to be received therefor:
Common	20,000	$ 20,000.00
		$
		$
		$
		$

ARTICLE SEVEN

The corporation will not commence business until at least one thousand dollars has been received as consideration for the issuance of shares.

ARTICLE EIGHT

The number of directors to be elected at the first meeting of the shareholders is: Three (3)

5

ARTICLE NINE

PARAGRAPH 1: It is estimated that the value of all property to be owned by the corporation for the following year wherever located will be $ 20,000.00

PARAGRAPH 2: It is estimated that the value of the property to be located within the State of Illinois during the following year will be $ 20,000.00

PARAGRAPH 3: It is estimated that the gross amount of business which will be transacted by the corporation during the following year will be $ 20,000.00

PARAGRAPH 4: It is estimated that the gross amount of business which will be transacted at or from places of business in the State of Illinois during the following year will be $ 20,000.00

Bertel S. Nelson
John D. Bregin
Jane L. Nelson
Ann Bregin

Incorporators

OATH AND ACKNOWLEDGMENT

STATE OF ILLINOIS
Cook County } ss.

I, R. W. Rafella, a Notary Public, do hereby certify that on the 9th day of January, 1960, Bertel S. Nelson, John D. Bregin, Jane L. Nelson, Ann Bregin (Names of Incorporators) personally appeared before me and being first duly sworn by me severally acknowledged that they signed the foregoing document in the respective capacities therein set forth and declared that the statements therein contained are true.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year above written.

Place (Notarial Seal) Here

R. W. Rafella
Notary Public

FORM B

ARTICLES OF INCORPORATION

Bison Gear & Engineering Corporation

The following fees are required to be paid at the time of issuing certificate of incorporation: *Filing fee*, $20.00; *Initial license fee* of 50c per $1,000.00 or 1/20 of 1% of the amount of stated capital and paid in surplus the corporation proposes to issue without further report (Article Six); *Franchise tax* of 1/20 of 1% of the *issued*, as above noted. However, the minimum *annual franchise tax* is $10.00 and varies monthly on $20,000 or less, as follows: January, $15; February, $14.17; March, $13.34; April, $12.50; May, $11.67; June, $10.84; July, $10.00; Aug., $9.17; Sept., $8.34; Oct., $7.50; Nov., $6.67; Dec., $5.84; (See Sec. 133, BCA).

In excess of $20,000.00 the *franchise tax* per $1,000.00 is as follows: Jan., $0.75; Feb., .7084; March, .6667; April, .625; May, .5834; June, .5417; July, .50; Aug., .4584; Sept., .4167; Oct., .375; Nov., .3334; Dec., .2917.

All shares issued in excess of the amount mentioned in Article Six of this application must be reported within 60 days from date of issuance thereof, and franchise tax and license fee paid thereon; otherwise, the corporation is subject to a penalty of 1% for each month on the amount until reported and subject to a fine not to exceed $500.00.

The same fees are required for a subsequent issue of shares except the filing fee is $1.00 instead of $20.00.

FILED
JAN 27 1960

Secretary of State.

(35647—20M—3-59)

File Number 3953 717 6

STATE OF ILLINOIS

OFFICE OF THE SECRETARY OF STATE

Whereas, ARTICLES OF MERGER OF

BISON GEAR & ENGINEERING CORPORATION

INCORPORATED UNDER THE LAWS OF THE STATE OF *ILLINOIS* HAS BEEN FILED IN THE OFFICE OF THE SECRETARY OF STATE AS PROVIDED BY THE BUSINESS CORPORATION ACT OF ILLINOIS, IN FORCE JULY 1, A.D. 1984.

Now Therefore, I, Jim Edgar, Secretary of State of the State of Illinois, by virtue of the powers vested in me by law, do hereby issue this certificate and attach hereto a copy of the Application of the aforesaid corporation.

In Testimony Whereof, *I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, at the City of Springfield, this* 22nd *day of* MAY *AD 19* 87 *and of the Independence of the United States the two hundred and* 11th.

SEAL OF THE STATE OF ILLINOIS AUG. 26TH 1818

Jim Edgar

SECRETARY OF STATE

C-212

BCA-11.25/11.30 (*Rev. Jul. 1984*)

Submit in Duplicate

Remit payment in check or Money Order, payable to "Secretary of State".

DO NOT SEND CASH!

Filing Fee is $100, but if merger or consolidation of more than 2 corporations $50 for each additional corporation.

JIM EDGAR
Secretary of State
State of Illinois

ARTICLES OF MERGER, CONSOLIDATION, EXCHANGE

File # 3953-717-6

This Space for Use By Secretary of State

Date 5/22/87

Filing Fee $ 100.00

Clerk

Pursuant to the provisions of "The Business Corporation Act of 1983", the undersigned corporation(s) hereby adopt(s) the following Articles of Merger, Consolidation or Exchange. (*Strike inapplicable words*)

1. The names of the corporations proposing to merge ~~consolidate~~ ~~exchange shares~~ ,and the State or Country of their incorporation, are;

Name of Corporation	State or Country of Incorporation
BGE Acquisition Corp.	Illinois 5449-917-5
Bison Gear & Engineering Corporation	Illinois 3953-717-6
	2X

2. The laws of the State or Country under which each corporation is incorporated permit such merger, consolidation or exchange.

3. The name of the surviving ~~new~~ ~~acquiring~~ corporation is Bison Gear & Engineering Corporation and it shall be governed by the laws of Illinois

4. The plan of merger ~~consolidation~~ ~~exchange~~ is as follows:

If not sufficient space to cover this point, add one or more sheets of this size

See Plan of Merger attached hereto as Exhibit "A".

Exhibit A

PLAN OF MERGER

Pursuant to the provisions of Section 11.05 of the Illinois Business Corporation Act, BGE Acquisition Corp., an Illinois corporation (the "Parent"), shall be merged into its wholly-owned subsidiary, Bison Gear & Engineering Corporation ("Bison").

1. The Parent owns 100% of the outstanding shares of capital stock of Bison.

2. Parent shall be merged into Bison in accordance with Section 11.05 of the Illinois Business Corporation Act. Bison shall be the surviving corporation in such merger and is hereinafter referred to as the "Surviving Corporation".

3. Upon the proposed merger becoming effective, each outstanding share of Bison shall cease to be outstanding, without any payment being made in respect thereof, and each 10 common shares of Parent shall be converted into 1 share, $1.00 par value per share, of the Surviving Corporation, certificates for which shall be issued to the shareholders of Parent, upon surrender of all outstanding shares of Parent.

4. The Articles of Incorporation of Bison shall be the Articles of Incorporation of the Surviving Corporation following the effective date of the merger until the same shall be altered or amended except that Article Four of the Articles of Incorporation of Bison shall be amended in its entirety to read as follows:

> "ARTICLE FOUR: The purpose or purposes for which the corporation is organized are the transaction of any or all lawful businesses for which corporations may be incorporated under the Illinois Business Corporation Act."

The by-laws of Parent shall be and remain the by-laws of the Surviving Corporation following the effective date of the merger until altered, amended or repealed.

5. The directors and officers of the Parent in office on the effective date of the merger shall continue in office and shall constitute the directors and officers of the Surviving Corporation for the term elected and until their respective successors shall be elected or appointed and shall have qualified.

6. If at any time the Surviving Corporation shall consider or be advised that any further assignment or conveyance is necessary or desireable to vest, perfect or confirm of record in the Surviving Corporation title to any property or right of Parent or otherwise to carry out the provisions hereof, the proper officers and directors of Parent, as of the effective date of the merger, shall execute and deliver any and all proper deeds, assignments or assurances and do all things necessary or proper to vest, perfect or confirm title to such property or rights in the Surviving Corporation.

5. The plan of ~~consolidation~~ merger ~~exchange~~ was approved, (a) as to each corporation not organized in Illinois, in compliance with the laws of the state under which it is organized, and (b) as to each Illinois corporation, as follows:

(The following items are not applicable to mergers under § 11.30 — 90% owned subsidiary provisions. See Article 7.)

(Only "X" one box for each corporation)

Name of Corporation	By the shareholders, a resolution of the board of directors having been duly adopted and submitted to a vote at a meeting of shareholders. Not less than the minimum number of votes required by statute and by the articles of incorporation voted in favor of the action taken. (§ 11.20)	By written consent of the shareholders having not less than the minimum number of votes required by statute and by the articles of incorporation. Shareholders who have not consented in writing have been given notice in accordance with § 7.10. (§ 11.20)	By written consent of ALL the shareholders entitled to vote on the action, in accordance with § 7.10 & § 11.20
BGE Acquisition Corp.	☐	☒	☐
Bison Gear & Engineering	☐	☒	☐
Corporation	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

6. (*Not applicable if surviving, new or acquiring corporation is an Illinois corporation*)

It is agreed that, upon and after the issuance of a certificate of merger, consolidation or exchange by the Secretary of State of the State of Illinois:

a. The surviving, new or acquiring corporation may be served with process in the State of Illinois in any proceeding for the enforcement of any obligation of any corporation organized under the laws of the State of Illinois which is a party to the merger, consolidation or exchange and in any proceeding for the enforcement of the rights of a dissenting shareholder of any such corporation organized under the laws of the State of Illinois against the surviving, new or acquiring corporation.

b. The Secretary of State of the State of Illinois shall be and hereby is irrevocably appointed as the agent of the surviving, new or acquiring corporation to accept service of process in any such proceedings, and

c. The surviving, new, or acquiring corporation will promptly pay to the dissenting shareholders of any corporation organized under the laws of the State of Illinois which is a party to the merger, consolidation or exchange the amount, if any, to which they shall be entitled under the provisions of "The Business Corporation Act of 1983" of the State of Illinois with respect to the rights of dissenting shareholders.

7. *(Complete this item if reporting a merger under § 11.30 — 90% owned subsidiary provisions.)*

Not applicable.

a. The number of outstanding shares of each class of each merging subsidiary corporation and the number of such shares of each class owned immediately prior to the adoption of the plan of merger by the parent corporation, are:

Name of Corporation	Total Number of Shares Outstanding of Each Class	Number of Shares of Each Class Owned Immediately Prior to Merger by the Parent Corporation

b. The date of mailing a copy of the plan of merger and notice of the right to dissent to the shareholders of each merging subsidiary corporation was _____, 19 _____.

Was written consent for the merger or written waiver of the 30 day period by the holders of all the outstanding shares of all subsidiary corporations received? ☐ Yes ☐ No

(If the answer is "No", the duplicate copies of the Articles of Merger may not be delivered to the Secretary of State until after 30 days following the mailing of a copy of the plan of merger and of the notice of the right to dissent to the shareholders of each merging subsidiary corporation.)

The undersigned corporation has caused these articles to be signed by its duly authorized officers, each of whom affirm, under penalties of perjury, that the facts stated herein are true.

Dated May 22, 19 87

~~Bison Gear & Engineering Corporati~~on
(Exact Name of Corporation)

attested by [signature]
(Signature of Secretary or Assistant Secretary)

by [signature]
(Signature of President or Vice President)

Carl R. Klein, Asst. Secretary
(Type or Print Name and Title)

Ronald D. Bullock, President
(Type or Print Name and Title)

Dated May 22, 19 87

BGE Acquisition Corp.
(Exact Name of Corporation)

attested by [signature]
(Signature of Secretary or Assistant Secretary)

by [signature]
(Signature of President or Vice President)

Carl R. Klein, Asst. Secretary
(Type or Print Name and Title)

Ronald D. Bullock, President
(Type or Print Name and Title)

Dated _____, 19 _____

_____
(Exact Name of Corporation)

attested by _____
(Signature of Secretary or Assistant Secretary)

by _____
(Signature of President or Vice President)

_____
(Type or Print Name and Title)

_____
(Type or Print Name and Title)

Form BCA-11.25/11.30

File No. _____

ARTICLES OF MERGER, CONSOLIDATION, EXCHANGE

Filing Fee $100.00, but if a merger or a consolidation of more than two corporations, $50 for each additional corporation.

FILED

MAY 22 1987

JIM EDGAR
Secretary of State

PAID
MAY 28 1987

RETURN TO:

Corporation Department
Secretary of State
Springfield, Illinois 62756
Telephone 217 — 782-6961

C-195

File Number 3953-717-6

STATE OF ILLINOIS
OFFICE OF THE SECRETARY OF STATE

Whereas, ARTICLES OF AMENDMENT TO THE ARTICLES OF INCORPORATION OF

BISON GEAR & ENGINEERING CORPORATION

INCORPORATED UNDER THE LAWS OF THE STATE OF ILLINOIS HAVE BEEN FILED IN THE OFFICE OF THE SECRETARY OF STATE AS PROVIDED BY THE BUSINESS CORPORATION ACT OF ILLINOIS, IN FORCE JULY 1, A.D. 1984.

Now Therefore, I, Jim Edgar, Secretary of State of the State of Illinois, by virtue of the powers vested in me by law, do hereby issue this certificate and attach hereto a copy of the Application of the aforesaid corporation.

In Testimony Whereof, *I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, at the City of Springfield, this* 2ND *day of* JUNE *AD 19* 87 *and of the Independence of the United States the two hundred and* 11TH.

SEAL OF THE STATE OF ILLINOIS
AUG. 26TH 1818

Jim Edgar
SECRETARY OF STATE

C-212

BCA-10.30 (*Form Rev. Jan. 1986*)

Submit in Duplicate

Remit payment in Check or Money Order, payable to "Secretary of State".
DO NOT SEND CASH!

JIM EDGAR
Secretary of State
State of Illinois

ARTICLE OF AMENDMENT

File # 3953-717-4

This Space For Use By Secretary of State	
Date	6-2-87
License Fee	$
Franchise Tax	$25
Filing Fee	$
Clerk	(31)

Pursuant to the provisions of "The Business Corporation Act of 1983", the undersigned corporation hereby adopts these Articles of Amendment to its Articles of Incorporation.

ARTICLE ONE The name of the corporation is Bison Gear & Engineering Corporation *(Note 1)*

ARTICLE TWO The following amendment of the Articles of Incorporation was adopted on May 26, 19 87 in the manner indicated below. (*"X" one box only.*)

☐ By a majority of the incorporators, provided no directors were named in the articles of incorporation and no directors have been elected; or by a majority of the board of directors, in accordance with Section 10.10, the corporation having issued no shares as of the time of adoption of this amendment; *(Note 2)*

☐ By a majority of the board of directors, in accordance with Section 10.15, shares having been issued but shareholder action not being required for the adoption of the amendment; *(Note 3)*

☐ By the shareholders, in accordance with Section 10.20, a resolution of the board of directors having been duly adopted and submitted to the shareholders. At a meeting of shareholders, not less than the minimum number of votes required by statute and by the articles of incorporation were voted in favor of the amendment; *(Note 4)*

☐ By the shareholders, in accordance with Sections 10.20 and 7.10, a resolution of the board of directors having been duly adopted and submitted to the shareholders. A consent in writing has been signed by shareholders having not less than the minimum number of votes required by statute and by the articles of incorporation. Shareholders who have not consented in writing have been given notice in accordance with Section 7.10; *(Note 4)*

☒ By the shareholders, in accordance with Sections 10.20 and 7.10, a resolution of the board of directors have been duly adopted and submitted to the shareholders. A consent in writing has been signed by all the shareholders entitled to vote on this amendment. *(Note 4)*

(INSERT AMENDMENT)

(Any article being amended is required to be set forth in its entirety.) (Suggested language for an amendment to change the corporate name is: RESOLVED, that the Articles of Incorporation be amended to read as follows:)

2X

(NEW NAME)

All changes other than name, include on page 2
(over)

RESOLVED THAT:

Paragraph 1 of Article Five of the Articles of Incorporation is amended to read as follows:

"Paragraph 1: The aggregate number of shares which the corporation is authorized to issue is 25,000, divided into one class. The designation of each class, the number of shares of each class, and the par value, if any, of the shares of each class, are as follows:

Class	Number of Shares	Par Value Per Share
Common	25,000	$1.00"

ARTICLE THREE The manner in which any exchange, reclassification or cancellation of issued shares, or a reduction of the number of authorized shares of any class below the number of issued shares of that class, provided for or effected by this amendment, is as follows: (*If not applicable, insert "No change"*)

No Change

ARTICLE FOUR (a) The manner in which said amendment effects a change in the amount of paid-in capital (Paid-in capital replaces the terms Stated Capital and Paid in Surplus and is equal to the total of these accounts) is as follows: (*If not applicable, insert "No change"*)

No Change

(b) The amount of paid-in capital (Paid in Capital replaces the terms Stated Capital and Paid in Surplus and is equal to the total of these accounts) as changed by this amendment is as follows: (*If not applicable, insert "No change"*)

	Before Amendment	After Amendment
Paid-in Capital	$ _____	$ _____

(Complete either Item 1 or 2 below)

(1) The undersigned corporation has caused these articles to be signed by its duly authorized officers, each of whom affirm, under penalties of perjury, that the facts stated herein are true.

Dated May 26, 19 87

Bison Gear & Engineering Corporation
(Exact Name of Corporation)

attested by _____
(Signature of Secretary or Assistant Secretary)

by _____
(Signature of President or Vice President)

Carl R. Klein, Assistant Secretary
(Type or Print Name and Title)

Ronald D. Bullock, President
(Type or Print Name and Title)

(2) If amendment is authorized by the incorporators, the incorporators must sign below.

OR

If amendment is authorized by the directors and there are no officers, then a majority of the directors or such directors as may be designated by the board, must sign below.

The undersigned affirms, under penalties of perjury, that the facts stated herein are true.

Dated _____, 19 ____

_____ _____

_____ _____

_____ _____

_____ _____

NOTES and INSTRUCTIONS

NOTE 1: State the true exact corporate name as it appears on the records of the office of the Secretary of State, BEFORE any amendments herein reported.

NOTE 2: Incorporators are permitted to adopt amendments ONLY before any shares have been issued and before any directors have been named or elected. (§ 10.10)

NOTE 3: Directors may adopt amendments without shareholder approval in only six instances, as follows:
(a) to remove the names and addresses of directors named in the articles of incorporation;
(b) to remove the name and address of the initial registered agent and registered office, provided a statement pursuant to § 5.10 is also filed;
(c) to split the issued whole shares and unissued authorized shares by multiplying them by a whole number, so long as no class or series is adversely affected thereby;
(d) to change the corporate name by substituting the word "corporation", "incorporated", "company", "limited", or the abbreviation "corp.", "inc.", "co.", or "ltd." for a similar word or abbreviation in the name, or by adding a geographical attribution to the name;
(e) to reduce the authorized shares of any class pursuant to a cancellation statement filed in accordance with § 9.05,
(f) to restate the articles of incorporation as currently amended. (§ 10.15)

NOTE 4: All amendments not adopted under § 10.10 or § 10.15 require (1) that the board of directors adopt a resolution setting forth the proposed amendment and (2) that the shareholders approve the amendment.

Shareholder approval may be (1) by vote at a shareholders' meeting (*either annual or special*) or (2) by consent, in writing, without a meeting.

To be adopted, the amendment must receive the affirmative vote or consent of the holders of at least 2/3 of the outstanding shares entitled to vote on the amendment (*but if class voting applies, then also at least a 2/3 vote within each class is required*).

The articles of incorporation may supercede the 2/3 vote requirement by specifying any smaller or larger vote requirement not less than a majority of the outstanding shares entitled to vote and not less than a majority within each class when class voting applies. (§ 10.20)

NOTE 5: When shareholder approval is by written consent, all shareholders must be given notice of the proposed amendment at least 5 days before the consent is signed. If the amendment is adopted, shareholders who have not signed the consent must be promptly notified of the passage of the amendment.(§§ 7.10 & 10.20)

Form BCA-10.30

File No. _____

ARTICLES OF AMENDMENT

Filing Fee $25.00

Filing Fee for Re-Stated Articles $100.00

FILED

JUN 02 1987

JIM EDGAR
Secretary of State

PAID

JUN 04 1987

RETURN TO:

Corporation Department
Secretary of State
Springfield, Illinois 62756
Telephone 217 — 782-6961

C-173.3

File # D 3953-717-6

Form **BCA-5.10**
NFP-105.10
(Rev. April 1995)

George H. Ryan
Secretary of State
~~Department of Business Services~~
Springfield, IL 62756
Telephone (217) 782-3647

STATEMENT OF CHANGE OF REGISTERED AGENT AND/OR REGISTERED OFFICE

FILED
OCT 24 1997
GEORGE H. RYAN
SECRETARY OF STATE

SUBMIT IN DUPLICATE

This space for use by Secretary of State
Date 10-24-97
Filing Fee $5
Approved:

Remit payment in check or money order, payable to "Secretary of State."

Type or print in black ink only
See reverse side for signature(s)

15

1. CORPORATE NAME: Bison Gear & Engineering Corporation

2. STATE OR COUNTRY OF INCORPORATION: Illinois

3. Name and address of the registered agent and registered office as they appear on the records of the office of the Secretary of State *(before change)*:

Registered Agent: James (*First Name*) R. (*Middle Name*) Winters (*Last Name*)

Registered Office: 2424 Wisconsin Avenue (*Number Street*) (*Suite No. (A P.O. Box alone is not acceptable)*)
Downers Grove (*City*) 60515-4019 (*Zip Code*) DuPage (*County*)

4. Name and address of the registered agent and registered office shall be *(after all changes herein reported)*:

Registered Agent: Guy (*First Name*) E. (*Middle Name*) Snyder (*Last Name*)

Registered Office: 222 N. LaSalle Street (*Number Street*) 2400 (*Suite No. (A P.O. Box alone is not acceptable)*)
Chicago (*City*) 60601 (*Zip Code*) Cook (*County*)

5. The address of the registered office and the address of the business office of the registered agent, as changed, will be identical.

6. The above change was authorized by: *("X" one box only)*
   a. ☒ By resolution duly adopted by the board of directors. *(Note 5)*
   b. ☐ By action of the registered agent. *(Note 6)*

NOTE: When the registered agent changes, the signatures of both president and secretary are required.

7. *(If authorized by the board of directors, sign here. See Note 5)*
The undersigned corporation has caused this statement to be signed by its duly authorized officers, each of whom affirms, under penalties of perjury, that the facts stated herein are true.

Dated July 31 19, 96 Bison Gear & Engineering Corporation
(Exact Name of Corporation)

attested by Bettie C. Bullock by Ronald D. Bullock
(Signature of Secretary or Assistant Secretary) *(Signature of President or Vice President)*

Bettie C. Bullock - Secretary Ronald D. Bullock - President
(Type or Print Name and Title) *(Type or Print Name and Title)*

(If change of registered office by registered agent, sign here. See Note 6)
The undersigned, under penalties of perjury, affirms that the facts stated herein are true.

Dated _____ 19,____ _____
(Signature of Registered Agent of Record)

NOTES

1. The registered office may, but need not be the same as the principal office of the corporation. However, the registered office and the office address of the registered agent must be the same.

2. The registered office must include a street or road address; a post office box number alone is not acceptable.

3. A corporation cannot act as its own registered agent.

4. If the registered office is changed from one county to another, then the corporation must file with the recorder of deeds of the new county a certified copy of the articles of incorporation and a certified copy of the statement of change of registered office. Such certified copies may be obtained ONLY from the Secretary of State.

5. Any change of *registered agent* must be by resolution adopted by the board of directors. This statement must then be signed by the president *(or vice-president)* and by the secretary *(or an assistant secretary)*.

6. The registered agent may report a change of the *registered office* of the corporation for which he or she is registered agent. When the agent reports such a change, this statement must be signed by the registered agent.

STATE OF ILLINOIS
Office of the Secretary of State

I hereby certify that this is a true and correct copy, consisting of Nineteen pages, as taken from the original on file in this office.

Jesse White
JESSE WHITE
SECRETARY OF STATE

DATED: March 01, 2005

BY: Jon P. Feely, Jr.

EXPEDITED
SECRETARY OF STATE

MAR 0 1 2005

EXP. FEES 50.00

COPY FEES 85.00

FOR 19 78

THE BUSINESS CORPORATION ACT

ANNUAL REPORT

D 3953-717-6

FILING FEE MUST ACCOMPANY ANNUAL REPORT

SECRETARY OF STATE OF ILLINOIS

SUBMIT ONLY $15.00 FEE

FILING FEE $15.00

USE TYPEWRITER IN EXECUTING THIS REPORT WHICH MUST BE FILED PRIOR TO MARCH 1st.

FILED FEB28-78

1638 50

1.) CORPORATE NAME
REGISTERED AGENT
REGISTERED OFFICE
CITY, STATE, ZIP CODE

BISON GEAR & ENGINEERING CORPORATION
% JOHN A KELLY JR
ONE FIRST NATL PLAZA SUITE 305
CHICAGO, ILLINOIS 60670

2.) THE NAME AND OFFICIAL POSITION OF THE OFFICER EXECUTING THIS REPORT IS:

Stephen B. Grzesiak, Assistant Secretary

(PRESIDENT, VICE PRESIDENT, SECRETARY, ASSISTANT SECRETARY, TREASURER, RECEIVER, ASSIGNEE, OR TRUSTEE)

3.) THE ABOVE CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF Illinois, PURSUANT TO THE PROVISIONS OF "THE BUSINESS CORPORATION ACT" OF THE STATE OF ILLINOIS, HEREBY MAKES THE FOLLOWING REPORT:

4.) THE NAMES AND RESPECTIVE ADDRESSES OF ITS OFFICERS AND DIRECTORS ARE: IF OFFICERS ARE DIRECTORS, SO STATE.

NAME	OFFICE	NUMBER AND STREET	CITY	STATE
William Diebel	PRESIDENT	6505 Oakton St.,	Morton Grove,	Ill.
Robert W. Diebel	SECRETARY	6505 Oakton St.,	Morton Grove,	Ill.
William Diebel	TREASURER	6505 Oakton St.,	Morton Grove,	Ill.
William Diebel	DIRECTOR	6505 Oakton St.,	Morton Grove,	Ill.
Robert W. Diebel	DIRECTOR	6505 Oakton St.,	Morton Grove,	Ill.
	DIRECTOR			
	DIRECTOR			
	DIRECTOR			

5.) THE FOLLOWING IS A BRIEF STATEMENT OF THE CHARACTER OF THE BUSINESS IN WHICH THE CORPORATION IS ACTUALLY ENGAGED:

Engineered power transmission products

6.) THE AGGREGATE NUMBER OF SHARES WHICH THE CORPORATION HAS AUTHORITY TO ISSUE (AS OF PRECEDING DECEMBER 31st)

IS 20,000 ITEMIZED AS FOLLOWS:

CLASS	SERIES (IF ANY)	NUMBER OF SHARES	PAR VALUE PER SHARE OR STATEMENT THAT SHARES ARE WITHOUT PAR VALUE
Common		20,000	Par Value $1.00 per share

7.) THE AGGREGATE NUMBER OF ISSUED SHARES (AS OF PRECEDING DECEMBER 31st)

IS 20,000 ITEMIZED AS FOLLOWS:

CLASS	SERIES (IF ANY)	NUMBER OF SHARES	PAR VALUE PER SHARE OR STATEMENT THAT SHARES ARE WITHOUT PAR VALUE
Common		20,000	Par Value $1.00 per share

8.) THE AMOUNT OF STATED CAPITAL AND PAID-IN SURPLUS AS OF DECEMBER 31st IS:

STATED CAPITAL $ 20,000.00

PAID-IN SURPLUS $ -0-

TOTAL $ 20,000.00

READ INSTRUCTIONS ON BACK OF FLYER BEFORE FILLING IN.

AW

9.) DOES THE CORPORATION ELECT TO PAY A FRANCHISE TAX BASED UPON ITS ENTIRE STATED CAPITAL AND PAID-IN SURPLUS?

(IF ANSWERED IN THE NEGATIVE, COMPLETE PARAGRAPHS 10 THROUGH 15.) ANSWER: _____

10.) THE TOTAL VALUE EXPRESSED IN DOLLARS OF ALL THE PROPERTY OF THE CORPORATION EVERYWHERE LOCATED ON _____ DAY OF _____, 19 _____ $ _____

11.) THE TOTAL VALUE EXPRESSED IN DOLLARS OF ALL THE PROPERTY OF THE CORPORATION LOCATED IN ILLINOIS ON _____ DAY OF _____, 19 _____ $ _____

12.) THE GROSS AMOUNT OF BUSINESS OF THE CORPORATION TRANSACTED EVERYWHERE DURING THE PAST TWELVE MONTHS ENDING _____ DAY OF _____, 19 _____ $ _____

13.) THE GROSS AMOUNT OF BUSINESS OF THE CORPORATION TRANSACTED BY IT AT OR FROM PLACES OF BUSINESS IN THE STATE OF ILLINOIS DURING THE PAST TWELVE MONTHS ENDING _____ DAY OF _____, 19 _____ $ _____

14. GIVE THE LOCATION OF THE PRINCIPAL PLACES OF BUSINESS OF THE CORPORATION IN EACH STATE WHERE AUTHORIZED TO TRANSACT BUSINESS AND THE AMOUNT OF BUSINESS TRANSACTED IN EACH STATE LAST YEAR:

15.) IF A FOREIGN CORPORATION, GIVE THE DATE OF INCORPORATION _____
AND THE PERIOD OF DURATION OR DATE OF EXPIRATION _____

16.) IF A FOREIGN CORPORATION, THE ADDRESS OF ITS PRINCIPAL OFFICE IN THE STATE OF ITS INCORPORATION IS:

_____
NUMBER AND STREET CITY STATE OR COUNTRY

IN WITNESS WHEREOF, THE UNDERSIGNED CORPORATION HAS CAUSED THIS REPORT TO BE EXECUTED IN ITS NAME BY ITS SECRETARY (PRESIDENT, VICE PRESIDENT, SECRETARY, ASSISTANT SECRETARY, TREASURER, RECEIVER OR TRUSTEE) AND ITS CORPORATE SEAL TO BE HERETO AFFIXED THIS 24 TH DAY OF FEBRUARY A.D. 1978

_____
EXACT CORPORATION NAME

PLACE (CORPORATE SEAL) HERE

BY Robert Diehl Secretary
(SIGNATURE OF PRESIDENT, VICE PRESIDENT, SECRETARY, ASSISTANT SECRETARY, TREASURER, RECEIVER OR TRUSTEE.)

STATE OF ILLINOIS
COUNTY OF EDGAR } S.S.

I, STEPHEN B. GRZELIAK, A NOTARY PUBLIC, DO HEREBY CERTIFY THAT ON THE 24TH DAY OF FEBRUARY A.D. 1978, THE ABOVE OFFICER APPEARED BEFORE ME BEING FIRST DULY SWORN BY ME ACKNOWLEDGED THAT HE SIGNED THE FOREGOING DOCUMENT IN THE CAPACITY THEREIN SET FORTH AND DECLARED THAT THE STATEMENTS THEREIN CONTAINED ARE TRUE.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND SEAL THE DAY AND YEAR BEFORE WRITTEN.

PLACE (NOTARIAL SEAL) HERE

Stephen B. Grzeliak
NOTARY PUBLIC

STATE OF ILLINOIS
Office of the Secretary of State

I hereby certify that this is a true and correct copy, consisting of Two pages, as taken from the original on file in this office.

Jesse White
JESSE WHITE
SECRETARY OF STATE

DATED: March 01, 2005

BY: Jim P. Stanley, Jr.

EXPEDITED
SECRETARY OF STATE

MAR 01 2005

EXP. FEES 50.00

COPY FEES 25.00

PLEASE TYPE OR PRINT CLEARLY IN BLACK INK

FILING DEADLINE [illegible] 01/01/8

RETURN TO:
Corporation Department
Secretary of State
Springfield, IL 62756
Telephone (217) 782-7808

STATE OF ILLINOIS
DOMESTIC CORPORATION ANNUAL REPORT

CORPORATION FILE NO
D 3953-717-[illegible]

YEAR OF 1987

1.) CORPORATE NAME
REGISTERED AGENT
REGISTERED OFFICE
CITY, IL, ZIP CODE

BISON GEAR & ENGINEERING CORPORATION
% JOHN A KELLY JR 031682
THREE FIRST NATL PLZ STE 2350
CHICAGO, IL. 60602-0000

2.) AGENT/OFFICE CHANGES ONLY (see [illegible])

BISON GEAR & ENGINEERING
Corporation Name

Registered Agent

Registered Office - Street Address

City, County, IL Zip Code

3.) Date Incorporated 01/25/1960
Give complete address of principal office, if other than above

Federal Employer Identification Number (FEIN) # 362435615

4.) The names and addresses of the officers and directors are: (If officers are directors, so state.)

NAME	OFFICE	NUMBER & STREET	CITY	STATE	ZIP
Daniel H. Stiehr	President	6505 Oakton Street,	Morton Grove,	IL	60053
Robert W. Diebel	Secretary	" " "	" "	"	"
William Diebel	Treasurer	" " "	" "	"	"
William Diebel	Director	" " "	" "	"	"
Robert W. Diebel	Director	" " "	" "	"	"
*(See below)..Addit. Officers	Director				

5.) The type of business actually conducted in Illinois is: Manufacturing

6.) Number of shares authorized and issued (as of 10/31/86)

CLASS	SERIES	PAR VALUE	NUMBER AUTHORIZED	NUMBER ISSUED
PAR STOCK			20,000	

*Daniel H. Stiehr, Director, 6505 Oakton Street, Morton Grove, IL 60053
Stephen Grzesiak, Asst. Treasurer & Asst. Secretary, 6505 Oakton Street, Morton Grove, IL 60053

7a.) The amount of paid-in capital as of 10/31/86 is:

*PAID-IN CAPITAL $ 20,000

*"Paid-in Capital" replaces the terms Stated Capital and Paid-in Surplus. It does not include Retained Earnings.

7b.) The Paid-in Capital as of 10/31/86 on record with the Secretary of State is:

TOTAL $ 20,000

(The figure in Item 7b may not be altered.)

ITEM 8 MUST BE SIGNED

8.) By DHS [signature], President 12/22/86
(Any Authorized Officer's Signature) (Title) (Date)
(Pres. or V. Pres. required if changes listed in 2)

Attest Robert W. Diebel, Secretary 12/27/86
(Secretary's or asst. Secretary's Signature required only if changes listed in 2) (Title) (Date)

Under the penalty of perjury and as an authorized officer, I declare that this annual report and, if applicable, the statement of change of registered agent and/or office pursuant to provisions of the Business Corporation Act has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete.

DO NOT DETACH

(PLEASE COMPLETE THE REVERSE SIDE OF THIS REPORT)

THE INFORMATION BELOW IS FOR THE PURPOSE OF COMPILING THE CERTIFIED LIST OF CORPORATIONS REQUIRED BY SECTION 1.25 OF THE BUSINESS CORPORATION ACT.

D 3953-717-6
File No

PRESIDENT DANIEL H STIEHR 6505 OAKTON ST MORTON GROVE 60053

SECRETARY ROBERT W. DIEBEL 6505 OAKTON ST MORTON GROVE

IF THE ABOVE OFFICERS' NAMES AND ADDRESSES ARE MISSING OR HAVE CHANGED, ENTER ONLY THE ADDITIONS OR CORRECTIONS BELOW.

20,000

PRESIDENT
NAME STREET ADDRESS CITY STATE ZIP CODE

SECRETARY
NAME STREET ADDRESS CITY STATE ZIP CODE

9. The amounts stated in parts (a) through (d) below are given for the twelve month period ending _____ 19 ____

The value of the property (gross assets)

(a) owned by the corporation, wherever located, was ..... (a) $ _____

(b) of the corporation located within the state of Illinois was ..... (b) $ _____

The gross amount of business transacted by the corporation

(c) everywhere for the above period was ..... (c) $ _____

(d) at or from places of business in Illinois for the above period was ..... (d) $ _____

Give the location of the principal places of business of the corporation in each state where authorized to transact business and the gross amount of business transacted in each state for the above period. (If necessary attach a second sheet.)

ALLOCATION FACTOR = $\frac{b + d}{a + c}$ = _____ (6 decimal places) *(Write this figure on line 11b below.)*

10. ☒ ALL property of the corporation is located in Illinois and ALL business of the corporation is transacted at or from places of business in Illinois; OR the corporation ELECTS to pay franchise tax on the basis of 100% of its total paid-in capital.

ALLOCATION FACTOR = 1.00000 *(Write this figure on line 11b below.)*

11. ANNUAL FRANCHISE TAX AND FEES

(a.)	Total Paid-in Capital *(Enter the GREATER of Item 7a or Item 7b from the other side of report)*	a. 20,000		
(b.)	ALLOCATION FACTOR *(Enter from Item 9 or Item 10 above)*	b. X 1.00000		
(c.)	ILLINOIS CAPITAL *(Multiply line (a.) by line (b.))*	c. 20,000		
(d.)	Omitted			
(e1.)	Multiply line (c) by .001 (Round to nearest cent)	e1. 20.00		
(e2.)	ANNUAL FRANCHISE TAX *(Enter amount from line (e1), but not less than $25)*		e2.	25.00
(f1.)	If Annual Report is late, multiply line (e2) by .10	f1.		
(f2.)	If Annual Franchise Tax is late, multiply line (e2) by .01 for each month late or part thereof (minimum $1.00)	f2.		
(f3.)	PENALTIES *(Add line (f1) and line (f2))*		f3.	-0-
(g.)	ANNUAL REPORT FILING FEE *($15)*		g.	+ 15.00
(h.)	CHANGE OF AGENT/OFFICE FILING FEE *($5) (Applicable if Item 2 on this annual report form shows any change.)*		h.	-0-
(i.)	TOTAL ANNUAL FRANCHISE TAX, FEES & PENALTIES DUE *(Add line (e2) + line (f3) + line (g) + line (h))*		i.	40.00

ITEM 8 MUST BE SIGNED

REMIT CHECK OR MONEY ORDER, PAYABLE TO "SECRETARY OF STATE", IN THE TOTAL AMOUNT DUE LISTED ON LINE 11i. THIS FEE MUST BE SUBMITTED WITH THIS ANNUAL REPORT FORM!
IF THE PROPER REMITTANCE IS NOT ENCLOSED, THIS REPORT WILL NOT BE ACCEPTED FOR FILING AND A LATE PENALTY MAY BE ASSESSED.

PLEASE BE SURE YOU HAVE SIGNED THE FRONT OF THIS FORM. (ITEM 8.)

Your cancelled check is your receipt.

YEAR OF 1995
File Prior to: 01/01/95

STATE OF ILLINOIS
DOMESTIC CORPORATION ANNUAL REPORT
PLEASE TYPE OR PRINT CLEARLY

CORPORATION FILE NO
D 3255-717-6

1) **NOTE:** A Change in the registered agent and or registered office may *only* be effected by filing form BCA 5.10 5.20. If there have been any changes in items 6 or 7a the enclosed BCA 14.30 *must be completed and submitted in the same envelope.*

2) CORPORATE NAME REGISTERED AGENT, REGISTERED OFFICE, CITY, IL ZIP CODE

BISON GEAR & ENGINEERING CORPORATION
% JAMES R WINTERS 011592
2424 WISCONSIN AVE
DOWNERS GROVE, IL. 60515-4017

DU PAGE
COUNTY

3) Date Incorporated IL 01/25/1955

4) **The names and residential addresses of ALL officers & directors MUST be listed here!**

OFFICE	NAME	NUMBER & STREET	CITY	STATE	ZIP
President	Ronald D. Bullock	2424 Wisconsin Ave	Downers Grove	IL	60515
Secretary	Bettie C Bullock	Same			
Treasurer	Kelly Bullock	Same			
Director	Norman S Bullock	Same			
Director	Carl Klein Asst Sec.	200 E Randolph	Chicago	IL	60601
Director	James Winters VP Finance	2424 Wisconsin Ave	Downers Grove	IL	60515

5) If 51% or more of the stock is owned by a minority or female, please check appropriate box Minority Owned Female Owned

6) Number of shares authorized and issued *as of* 10/31/95

CLASS	SERIES	PAR VALUE	NUMBERED AUTHORIZED	NUMBER ISSUED
COMMON		1.00000	25000	20000.000

IMPORTANT! Whenever the amount in item 6 or 7a differs from the Secretary of State's records, the enclosed BCA 14.30 must be completed

7a) The amount of paid in capital as of 10/31/95 $ 220,000

7b) The Paid in Capital on record with the Secretary of State is $ 220 000

(Paid-in Capital reflects the sum of the stated Capital and Paid-in surplus accounts.)

8) By [signature] VP Finance 12-28-95
(Any Authorized Officer's Signature) (Title) (Date)

RETURN TO

George H. Ryan
Secretary of State
Department of Business Services
Springfield, IL 62756
Telephone (217) 782-7808

ITEM 8 MUST BE SIGNED!

Under the penalty of perjury and as an authorized officer, I declare that this annual report, pursuant to provisions of the Business Corporation Act, has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete

(PLEASE COMPLETE THE REVERSE SIDE OF THIS REPORT)

PRESIDENT RONALD D BULLOCK 2424 WISCONSIN AVE DOWNERS GROVE 60515

SECRETARY BETTIE C BULLOCK SAME

IF THE ABOVE OFFICERS' NAMES AND ADDRESSES ARE MISSING OR HAVE CHANGED, ENTER ONLY THE ADDITIONS OR CORRECTIONS BELOW.

D 3255-717-6
File No

	NAME	STREET ADDRESS	CITY	STATE	ZIP CODE
PRESIDENT					
SECRETARY					

ENTER FEDERAL EMPLOYER IDENTIFICATION NUMBER IF NOT PRINTED 362435919

(Item 9. OR 10.(a.) OR 10.(b.) whichever is applicable, MUST be completed)

9.) The amounts stated in parts (a) through (e) below are given for the twelve month period ending _____, 19_____.

The value of the property (gross assets)

(a) owned by the corporation, wherever located, was ..... (a) $ _____

(b) of the corporation located within the state of Illinois was ..... (b) $ _____

The gross amount of business transacted by the corporation

(c) everywhere for the above period was ..... (c) $ _____

(d) at or from places of business in Illinois for the above period was ..... (d) $ _____

Give the location of the principal places of business of the corporation in each state where authorized to transact business and the gross amount of business transacted in each state for the above period. (If necessary attach a second sheet.)

ALLOCATION FACTOR = $\frac{b + d}{a + c}$ = _____ (6 decimal places) *(Write this figure on line 11b below.)*

10.) (a.) ☐ ALL property of the corporation is located in Illinois and ALL business of the corporation is transacted at or from places of business in Illinois.

(b.) ☐ the corporation ELECTS to pay franchise tax on the basis of 100% of its total paid-in capital

ALLOCATION FACTOR = 1.00000 *(Write this figure on line 11b below.)*

STOP! Item 9 or 10 must be completed before continuing to Item 11.

11.) ANNUAL FRANCHISE TAX AND FEES

(a.) Total Paid-in Capital *(Enter amount from Item 7a from the other side of report. If late, enter the greater of 7a or 7b.)*	a. 220,000	
(b.) ALLOCATION FACTOR *(Enter from Item 9 or Item 10 above)*	b. X 1.0000	
(c.) ILLINOIS CAPITAL *(Multiply line (a.) by line (b.))*	c. 220,000	
(d1.) Multiply line (c.) by .001 (Round to nearest cent)	d1.	
(d2.) ANNUAL FRANCHISE TAX *(Enter amount from line (d1.), but not less than $25)*		d2. $ 20.00
(e1.) If Annual Report is late, multiply line (d2.) by.10	e1.	
(e2.) If Annual Franchise Tax is late, multiply line (d2.) by .01 for each month late or part thereof (minimum $1.00)	e2	
(e3.) INTEREST & PENALTIES *(Add line (e1.) and (e2.)*		e3.
(f.) ANNUAL REPORT FILING FEE *($15)*		f. +15.00
(g.) TOTAL ANNUAL FRANCHISE TAX, FEES, INTEREST, & PENALTIES DUE *(Add line (d2.) + line (e3.) + line (f.)*		g. 235.00

MAKE CHECKS PAYABLE TO ILLINOIS SECRETARY OF STATE.
(PLACE CORPORATE FILE NUMBER ON CHECK.)

IMPORTANT!

If there have been changes in Items 6 or 7, the enclosed form BCA 14.30 must be executed and submitted with this annual report in the same envelope.

STATE OF ILLINOIS
Office of the Secretary of State

I hereby certify that this is a true and correct copy, consisting of Two pages, as taken from the original on file in this office.

Jesse White
JESSE WHITE
SECRETARY OF STATE

DATED: March 01, 2005

BY: James P. Feely, Jr.

EXPEDITED
SECRETARY OF STATE

MAR 01 2005

EXP. FEES 50.00

COPY FEES 25.00

YEAR OF 1997
File Prior to: 01/01/97

STATE OF ILLINOIS
DOMESTIC CORPORATION ANNUAL REPORT
PLEASE TYPE OR PRINT CLEARLY IN BLACK INK

FILE NO
D 3953-717-6

1.) NOTE: A Change in the registered agent and/or registered office may only be effected by filing form BCA-5.10/5.20. If there have been any changes in items 6 or 7a the enclosed BCA-14.30 must be completed and submitted in the same envelope.

**** IF ANNUAL REPORT IS FILED AFTER 12/31/96 FILING FEE IS $25.00 ****

2.) CORPORATE NAME, REGISTERED AGENT, REGISTERED OFFICE, CITY, IL, ZIP CODE

BISON GEAR & ENGINEERING CORPORATION
% JAMES R WINTERS 011692
2424 WISCONSIN AVE
DOWNERS GROVE, IL. 60515-4019

DU PAGE
COUNTY

3.) Date Incorporated IL 01/25/1960

4.) The names and residential addresses of ALL officers & directors MUST be listed here!

OFFICE	NAME	NUMBER & STREET	CITY	STATE	ZIP
President	Ronald D. Bullock	2424 Wisconsin Ave	Downers Grove	IL	60515
Secretary	Bettie C. Bullock	" "	"	"	"
Treasurer	Kelly Bullock	" "	"	"	"
Director	Norman T. Bullock	" "	"	"	"
Director	James R. Winters	" "	"	"	"
Director	[illegible]	" "	"	"	"

5.) If 51% or more of the stock is owned by a minority or female, please check appropriate box Minority Owned Female Owned

6.) Number of shares authorized and issued (as of 10/31/96):

CLASS	SERIES	PAR VALUE	NUMBERED AUTHORIZED	NUMBER ISSUED
COMMON		1.00000	25000	20000.000

EDITED

IMPORTANT! Whenever the amount in item 6 or 7a differs from the Secretary of State's records, the enclosed BCA 14.30 must be completed.

7a.) The amount of paid-in capital as of 10/31/96 is: $

7b.) The Paid-in Capital on record with the Secretary of State is: $ 220 000

SECRETARY OF STATE
(Paid-in Capital reflects the sum of the stated Capital and Paid-in surplus accounts.)

8.) By [signature] VP Finance 12-30-96
(Title) (Date)

RETURN TO:
George H. Ryan
Secretary of State
Department of Business Services
Springfield, IL 62756
Telephone (217) 782-7808

ITEM 8 MUST BE SIGNED!

Under the penalty of perjury and as an authorized officer, I declare that this annual report, pursuant to provisions of the Business Corporation Act has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete.

(PLEASE COMPLETE THE REVERSE SIDE OF THIS REPORT)

PRESIDENT RONALD D BULLOCK 2424 WISCONSIN AVE DOWNERS GROVE 60515

SECRETARY BETTIE C BULLOCK SAME

IF THE ABOVE OFFICERS' NAMES AND ADDRESSES ARE MISSING OR HAVE CHANGED, ENTER ONLY THE ADDITIONS OR CORRECTIONS BELOW.

D 3953-717-6
File No

PRESIDENT
NAME STREET ADDRESS CITY STATE ZIP CODE

SECRETARY
NAME STREET ADDRESS CITY STATE ZIP CODE

ENTER FEDERAL EMPLOYER IDENTIFICATION NUMBER IF NOT PRINTED = 362435619

(Item 9, OR 10.(a.) OR 10.(b.) whichever is applicable, MUST be completed)

9.) The amounts stated in parts (a) through (e) below are given for the twelve month period ending _____, 19_____.

The value of the property (gross assets)

(a) owned by the corporation, wherever located, was ..... (a) $ _____

(b) of the corporation located within the state of Illinois was ..... (b) $ _____

The gross amount of business transacted by the corporation

(c) everywhere for the above period was ..... (c) $ _____

(d) at or from places of business in Illinois for the above period was ..... (d) $ _____

Give the location of the principal places of business of the corporation in each state where authorized to transact business and the gross amount of business transacted in each state for the above period (If necessary attach a second sheet.)

ALLOCATION FACTOR = $\frac{b + d}{a + c}$ = _____ (6 decimal places) *(Write this figure on line 11b below.)*

10.) (a.) ☐ ALL property of the corporation is located in Illinois and ALL business of the corporation is transacted at or from places of business in Illinois.

(b.) ☐ the corporation ELECTS to pay franchise tax on the basis of 100% of its total paid-in capital

ALLOCATION FACTOR = 1.00000 *(Write this figure on line 11b below.)*

STOP! Item 9 or 10 must be completed before continuing to Item 11.

11.) ANNUAL FRANCHISE TAX AND FEES

(a.) Total Paid-in Capital *(Enter amount from Item 7a from the other side of report. If late, enter the greater of 7a or 7b.)*	a	220,000
(b.) ALLOCATION FACTOR *(Enter from Item 9 or Item 10 above)*	b	x 1,000
(c.) ILLINOIS CAPITAL *(Multiply line (a.) by line (b.))*	c.	220,000
(d1.) Multiply line (c.) by .001 (Round to nearest cent)	d1.	
(d2.) ANNUAL FRANCHISE TAX *(Enter amount from line (d1.), but not less than $25)*		d2 [illegible]
(e1.) If Annual Report is late, multiply line (d2.) by .10	e1.	[illegible]
(e2.) If Annual Franchise Tax is late, multiply line (d2.) by .01 for each month late or part thereof (minimum $1.00)	e2.	[illegible]
(e3.) INTEREST & PENALTIES *(Add line (e1.) and (e2.)*		e3 [illegible]
(f.) ANNUAL REPORT FILING FEE *($15)*		f [illegible]
(g.) TOTAL ANNUAL FRANCHISE TAX, FEES, INTEREST, & PENALTIES DUE *(Add line (d2.) + line (e3.) + line (f.))*		g [illegible]

MAKE CHECKS PAYABLE TO ILLINOIS SECRETARY OF STATE (PLACE CORPORATE FILE NUMBER ON CHECK.)

[illegible]

IMPORTANT!

If there have been changes in Items 6 or 7, the enclosed form BCA 14.30 must be executed and submitted with this annual report in the same envelope.

STATE OF ILLINOIS
Office of the Secretary of State

I hereby certify that this is a true and correct copy, consisting of Two pages, as taken from the original on file in this office.

Jesse White

JESSE WHITE
SECRETARY OF STATE

DATED: March 01, 2005

BY: Joan P. Feely, Jr.

EXPEDITED
SECRETARY OF STATE

MAR 01 2005

EXP. FEES 50.00

COPY FEES 25.00

TRUSTEE'S DEED

R97-077597

RECORDER
DU PAGE COUNTY

97 JUN -2 PM 4:00

This indenture made this 30th day of May, 19 97 between THE CHICAGO TRUST COMPANY, a corporation of Illinois, as Trustee under the provisions of a deed or deeds in trust, duly recorded and delivered to said company in pursuance of a trust agreement dated the 23rd day of March 19 77, and known as Trust Number 1069459, party of the first part, and

Reserved for Recorder's Office

Wisconsin Avenue Property L.L.C.

whose address is:

2424 Wisconsin Ave.
Downers Grove, IL 60515

party of the second part.

WITNESSETH, That said party of the first part, in consideration of the sum of TEN and no/100 DOLLARS ($10.00) AND OTHER GOOD AND VALUABLE considerations in hand paid, does hereby CONVEY AND QUITCLAIM unto said party of the second part, the following described real estate, situated in County, Illinois, to wit:

~~Lot 4 of Frank Lopata's Resubdivision of Lots 10, 11 and 12 in the~~ resubdivision of ~~Lots~~ 8 to 13 inclusive in Ellsworth ~~Park~~ Unit No. * 5, being a subdivision ~~situated~~ in part ~~of the~~ Southwest quarter and the Southeast ~~quarter of Section~~ 12, Township 38 North, Range 10, ~~East of the~~ Third Principal Meridian, in DuPage County, Illin- ~~ois.~~ * 3, and Lot 24 in ~~Ellworth Park Unit No~~.

(See ATTACHED)

Property Address: 2424 Wisconsin Avenue, Downers Grove, IL

SEE ATTACHED RIDER

LAW TITLE

Permanent Tax Number: 08-12-~~303~~ 302-013

together with the tenements and appurtenances thereunto belonging.

TO HAVE AND TO HOLD the same unto said party of the second part, and to the proper use, benefit and behoof forever of said party of the second part.

This deed is executed pursuant to and in the exercise of the power and authority granted to and vested in said trustee by the terms of said deed or deeds in trust delivered to said trustee in pursuance of the trust agreement above mentioned. This deed is made subject to the lien of every trust deed or mortgage (if any there be) of record in said county given to secure the payment of money, and remaining unreleased at the date of the delivery hereof.

F. 154 R. 11/95

IN WITNESS WHEREOF, said party of the first part has caused its corporate seal to be hereto affixed, and has caused its name to be signed to these presents by its Assistant Vice President and attested by its Assistant Secretary, the day and year first above written.

R97- 77597

THE CHICAGO TRUST COMPANY,
as Trustee as Aforesaid

By: _____
Assistant Vice President

Attest: _____
Assistant Secretary

State of Illinois
County of DUPAGE } ss.

I, the undersigned, a Notary Public in and for the County and State aforesaid, do hereby certify, that the above named Assistant Vice President and Assistant Secretary of THE CHICAGO TRUST COMPANY, Grantor, personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such Assistant Vice President and Assistant Secretary, respectively, appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act and as the free and voluntary act of said Company for the uses and purposes therein set forth; and the said Assistant Secretary then and there acknowledged that the said Assistant Secretary, as custodian of the corporate seal of said Company, caused the corporate seal of said Company to be affixed to said instrument as said Assistant Secretary's own free and voluntary act and as the free and voluntary act of said Company for the uses and purposes therein set forth.

Given under my hand and Notarial Seal this MAY 30, 1997 Date

"OFFICIAL SEAL"
MEAGEN L. ERICKSEN
Notary Public, State of Illinois
My Commission Expires 4/17/00

_____
NOTARY PUBLIC

PROPERTY ADDRESS:

2424 Wisconsin Avenue, Downers Grove, IL

This instrument was prepared by:

Melanie M. Hinds
The Chicago Trust Company
171 N. Clark Street MLO9LT
Chicago, IL 60601-3294

AFTER RECORDING, PLEASE MAIL TO:

NAME Barry P. Siegel, Esq.

ADDRESS 230 W. Monroe St. #325 OR BOX NO. _____

CITY, STATE Chicago, IL 60606

R97- 77597

Lot 4 of Frank Lopata's Resubdivision of Lots 10, 11 and 12 in the resubdivision of Lots 8 to 13 inclusive in Ellsworth Park Unit No. 3, and Lot 24 in Ellsworth Park Unit No. 5, being a subdivision situated in part of the Southwest quarter and the Southeast quarter of Section 12, Township 38 North, Range 10, East of the Third Principal Meridian, in DuPage County, Illinois.

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
DU PAGE CO. NO. 022 0 3 7 8 2 7
JUN-2'97 DEPT. OF REVENUE 999.00
P.B. 11366

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
DU PAGE CO. NO. 022 0 3 7 8 2 8
JUN-2'97 DEPT. OF REVENUE 999.00
P.B. 11366

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
DU PAGE CO. NO. 022 0 3 7 8 2 9
JUN-2'97 DEPT. OF REVENUE 999.00
P.B. 11366

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
DU PAGE CO. NO. 022 0 3 7 8 3 0
JUN-2'97 DEPT. OF REVENUE 999.00
P.B. 11366

TAXES TO

WISCONSIN Avenue Property
2424 WISCONSIN AVE.
Downers Grove, IL. 60515

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
DU PAGE CO. NO. 022 0 3 7 8 3 1
JUN-2'97 DEPT. OF REVENUE 999.00
P.B. 11366

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
DU PAGE CO. NO. 022 0 3 7 8 3 2
JUN-2'97 DEPT. OF REVENUE 999.00
P.B. 11366

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
DU PAGE CO. NO. 022 0 3 7 8 3 3
JUN-2'97 DEPT. OF REVENUE 999.00
P.B. 11366

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
DU PAGE CO. NO. 022 0 3 7 8 3 4
JUN-2'97 DEPT. OF REVENUE 999.00
P.B. 11366

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
DU PAGE CO. NO. 022 0 3 7 8 3 5
JUN-2'97 DEPT. OF REVENUE 999.00
P.B. 11366

STATE OF ILLINOIS
REAL ESTATE TRANSFER TAX
DU PAGE CO. NO. 022 0 3 7 8 3 6
JUN-2'97 DEPT. OF REVENUE 999.00
P.B. 11366

R97- 77597

DU PAGE CO. NO. 022 0 3 7 8 3 7 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 3 8 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 3 9 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 4 0 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 4 1 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 4 2 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 4 4 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 4 5 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 4 6 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 4 7 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 4 8 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 4 9 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 5 0 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 999.00 P.B. 11366

DU PAGE CO. NO. 022 0 3 7 8 5 1 STATE OF ILLINOIS REAL ESTATE TRANSFER TAX JUN-2-97 DEPT. OF REVENUE 774.00 P.B. 11366

24,75.00

5/28/97-F:\DATA\744171\WJU\DOCUMENT\PARTNER.MIN

PARTNERSHIP MINUTES
RESOLUTION OF 2430 WISCONSIN COMPANY,
an Illinois Partnership

(SALE OF 2424 WISCONSIN AVENUE, DOWNERS GROVE, ILLINOIS)

A duly constituted, authorized and empowered quorum of the Partners of **2430 WISCONSIN COMPANY**, an Illinois Partnership, having met, conferred consented pursuant to applicable statutes and the rules and by-laws of the Partnership on May 29, 1997, and discussion and recommendations having been made, the Partners ratified, approved and adopted the following resolution of the Partnership by the requisite majority:

BE IT RESOLVED, the Partnership is empowered and authorized to contract with Roy Acquisition Corporation, an Illinois corporation, or its nominee and consummate closing for the sale of certain real estate located at 2424 Wisconsin Avenue, Downers Grove, Illinois, for a sale price of $1,650,000.00 (plus or minus prorations).

FURTHER RESOLVED, that the Partners of the Partnership authorize **DANIEL H. STIEHR** to execute such instruments and take such actions required to complete such sale in a manner consistent with the terms and conditions of the Real Estate Purchase Agreement by and between **2430 WISCONSIN AVENUE**, a partnership dated October 10, 1996 and that all actions taken to date by DANIEL STIEHR consistent with the Contract are hereby ratified and confirmed.

2430 WISCONSIN COMPANY

BY: Doris D. Stiehr
Partner

BY: Ward Ellen N. Diehl
Partner

POA

5/28/97-F:\DATA\744171\WJU\DOCUMENT\FIRPTA

FIRPTA AFFIDAVIT

Section 1445 of the Internal Revenue Code provides that a transferee of a U.S. real property interest must withhold tax if the transferor is a foreign person. To inform the transferee that withholding of tax is not required upon the disposition of a U.S. real property interest by **2430 WISCONSIN COMPANY**, an Illinois partnership, the undersigned hereby certifies the following on behalf of said partnership.

1. **2430 Wisconsin Company**, an Illinois partnership is not a foreign corporation, foreign partnership, foreign trust, or foreign estate as those terms are defined in the Internal Revenue Code and Income Tax Regulations;

2. **2430 Wisconsin Company**, an Illinois partnership's U.S. employer identification number is 329-30-4810;

3. **2430 Wisconsin Company**, an Illinois partnership's office address is 2840 Lafayette Rd Boulder Co 80303 and **2430 Wisconsin Company** understands that this certification may be disclosed to the Internal Revenue Service by transferee and that any false statement contained herein could be punished by fine, imprisonment, or both.

Under penalties of perjury, I declare that I have examined this certification and to the best of my knowledge and belief it is true, correct, and complete, and I further declare that I have authority to sign this document on behalf of **2430 Wisconsin Company**, an Illinois partnership.

Dated: 6-2, 1997

2430 WISCONSIN COMPANY
an Illinois partnership

X Daniel H Stehr
Partner

SUBSCRIBED and **SWORN** to
before me this 2nd day of June, 1997.

NOTARY PUBLIC

OFFICIAL SEAL
WILLIAM J ULRICH JR
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES: 11/14/00

BILL OF SALE

Seller, **2430 WISCONSIN COMPANY, an Illinois General Partnership,** in consideration of Ten dollars ($10.00), receipt whereof is hereby acknowledged, does hereby sell, assign, transfer and set over to Buyer, **WISCONSIN AVENUE PROPERTY, L.L.C.** all personal property located at the real estate commonly known as 2424 Wisconsin Avenue, Downers Grove, Illinois, pursuant to the Contract for Sale of Commercial Real Estate dated October 10, 1996.

Seller hereby represents and warrants to Buyer that Seller is the absolute owner of said property, that said property is free and clear of all liens, charges and encumbrances, and that Seller has full right, power and authority to sell said personal property and to make this bill of sale. All warranties of quality, fitness, and merchantability are hereby excluded.

IN WITNESS WHEREOF, Seller has caused this bill of sale to be signed and sealed this 2nd day of June, 1997.

2430 WISCONSIN COMPANY,
an Illinois General Partnership

X Daniel H. Stiehr (SEAL)
PARTNER

STATE OF ILLINOIS)
) SS
COUNTY OF DUPAGE)

I, the undersigned, a Notary Public, in and for the County and Sate aforesaid, DO HEREBY CERTIFY that the same person whose name is subscribed to the foregoing instrument as such person, appeared before me this day in person and acknowledged that he signed and delivered said instrument as his own free and voluntary act.

GIVEN under my hand and official seal this 2nd *day of June, 1997.*

OFFICIAL SEAL
WILLIAM J. ULRICH JR
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES: 11/14/00

NOTARY PUBLIC

STATE OF TEXAS)
)
COUNTY OF GALVESTON)

AFFIDAVIT

The undersigned affiant Jerry Schuchmann, an individual resident of Friendswood, Texas ("Affiant"), hereby states and affirms as follows:

1. Affiant was formerly employed by International Piping Services Co. ("IPSCO") at the site commonly known as 2424 Wisconsin Avenue, Downers Grove, Illinois (the "Site") from June 2, 1997 until February 2001.

2. IPSCO's operations at the Site from June 2, 1997 until February 2001 consisted of light machining and welding associated with the manufacture of pipe fittings.

3. In February 2001, the pipe manufacturing operations at the Site were moved to Houston, Texas, and at that time Affiant ceased to work at the Site.

4. Affiant position at the Site for IPSCO from June 2, 1997 to February 2001 was Manager of Manufacturing, and Affiant's job responsibilities in that capacity included the management of all of IPSCO's manufacturing activities at the Site during that time period.

5. Affiant's position as Manager of Manufacturing for IPSCO was such that any release of hazardous substances at the Site from IPSCO's operations during the period of Affiant's employment at the Site (*i.e.*, between June 2, 1997 and February 2001) would have come to the attention of Affiant. During that time period, Affiant did not witness or have any notice or knowledge of any release of any hazardous substances at the Site in connection with IPSCO's operations.

FURTHER AFFIANT SAYETH NOT.

Dated: February 25 2005

JERRY SCHUCHMANN

Subscribed and sworn to before me this
25 day of February, 2005

Notary Public

SABINA MALKA
Notary Public, State of Texas
My Commission Expires
March 23, 2008

STATE OF ILLINOIS)
)
COUNTY OF DUPAGE)

AFFIDAVIT

The undersigned affiant Eric Porter, an individual resident of Downers Grove, Illinois ("Affiant"), hereby states and affirms as follows:

1. Affiant has been employed by Flowserve Corporation ("Flowserve") at the site known as 2424 Wisconsin Avenue, Downers Grove, Illinois from February 2001 until the present time. Affiant's position for Flowserve is Illinois Branch Manager.

2. From February 2001 until the present, the operations at the Site have consisted of warehousing of piping components.

3. Affiant's position at the Site as Illinois Branch Manager for Flowserve is such that any release of hazardous substances at the Site from Flowserve's operations from February 2001 until the present would have come to the attention of Affiant. During the period from February 2001 to the present, Affiant has not witnessed or received any knowledge or notice of any release of any hazardous substances at the Site in connection with Flowserve's operations at the Site.

FURTHER AFFIANT SAYETH NOT.

Dated: February 25, 2005

ERIC PORTER

Subscribed and sworn to before me this
25th day of February, 2005

Notary Public

OFFICIAL SEAL
KAREN M BEZDICEK
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES: 05-29-07

Designation: E 1527 - 94

AMERICAN SOCIETY FOR TESTING AND MATERIALS
1916 Race St. Philadelphia, Pa 19103
Reprinted from the Annual Book of ASTM Standards. Copyright ASTM
If not listed in the current combined index, will appear in the next edition.

Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process[1]

This standard is issued under the fixed designation E 1527; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 *Purpose*—The purpose of this practice, as well as Practice E 1528, is to define good commercial and customary practice in the United States of America for conducting an *environmental site assessment*[2] of a parcel of *commercial real estate* with respect to the range of contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and *petroleum products*. As such, this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner defense* to CERCLA liability: that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC § 9601(35)(B). (See Appendix X1 for an outline of CERCLA's liability and defense provisions.)

1.1.1 *Recognized Environmental Conditions*—In defining a standard of good commercial and customary practice for conducting an *environmental site assessment* of a parcel of *property*, the goal of the processes established by this practice is to identify *recognized environmental conditions*. The term *recognized environmental conditions* means the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, groundwater, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

1.1.2 *Two Related Practices*—This practice is closely related to Practice E 1528. Both are *environmental site assessments* for *commercial real estate*. See 4.3.

1.1.3 *Petroleum Products*—*Petroleum products* are included within the scope of both practices because they are of concern with respect to many parcels of *commercial real estate* and current custom and usage is to include an inquiry into the presence of *petroleum products* when doing an *environmental site assessment* of *commercial real estate*. Inclusion of *petroleum products* within the scope of this practice and Practice E 1528 is not based upon the applicability, if any, of CERCLA to *petroleum products*. (See Appendix X1 for discussion of *petroleum exclusion* to CERCLA liability.)

1.1.4 *CERCLA Requirements Other Than Appropriate Inquiry*—This practice does not address whether requirements in addition to *appropriate inquiry* have been met in order to qualify for CERCLA's *innocent landowner defense* (for example, the duties specified in 42 USC § 9607(b)(3)(a) and (b) and cited in Appendix X1).

1.1.5 *Other Federal, State, and Local Environmental Laws*—This practice does not address requirements of any state or local laws or of any federal laws other than the appropriate inquiry provisions of CERCLA's *innocent landowner defense*. *Users* are cautioned that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. *Users* should also be aware that there are likely to be other legal obligations with regard to *hazardous substances* or *petroleum products* discovered on *property* that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance.

1.2 *Objectives*—Objectives guiding the development of this practice and Practice E 1528 are (1) to synthesize and put in writing good commercial and customary practice for *environmental site assessments* for *commercial real estate*, (2) to facilitate high quality, standardized *environmental site assessments*, (3) to ensure that the standard of *appropriate inquiry* is practical and reasonable, and (4) to clarify an industry standard for *appropriate inquiry* in an effort to guide legal interpretation of CERCLA's *innocent landowner defense*.

1.3 *Considerations Beyond Scope*—The use of this practice is strictly limited to the scope set forth in this section. Section 12 of this practice, identifies, for informational purposes, certain environmental conditions (not an all-inclusive list) that may exist on a *property* that are beyond the scope of this practice but may warrant consideration by parties to a *commercial real estate* transaction.

1.4 *Organization of This Practice*—This practice has several parts and two appendixes. Section 1 is the Scope. Section 2 is Referenced Documents. Section 3, Terminology, has definitions of terms not unique to this practice and descriptions of terms unique to this practice and acronyms. Section 4 is Significance and Use of this practice. Section 5 describes User's Responsibilities. Sections 6 through 11 are the main

[1] This practice is under the jurisdiction of ASTM Committee E-50 on Environmental Assessment and is the direct responsibility of Subcommittee E50.02 on Commercial Real Estate Transactions.

Current edition approved April 15, 1994. Published June 1994. Originally published as E 1527 - 93. Last previous edition E 1527 - 93.

[2] All definitions, descriptions of terms, and acronyms are defined in Section 3. Whenever terms defined in 3.2 or described in 3.3 are used in this practice, they are in *italics*.

body of the Phase I Environmental Site Assessment, including evaluation and report preparation. Section 12 provides additional information regarding non-scope considerations (see 1.3). The appendixes are included for information and are not part of the procedures prescribed in either this practice or Practice E 1528. Appendix X1 explains the liability and defense provisions of CERCLA that will assist the user in understanding the user's responsibilities under CERCLA; it also contains other important information regarding CERCLA and this practice. Appendix X2 provides a recommended table of contents and report format for a Phase I Environmental Site Assessment Report.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Document

2.1 *ASTM Standard:*

E 1528 Practice for Environmental Site Assessments: Transaction Screen Process[3]

3. Terminology

3.1 This section provides definitions, descriptions of terms, and a list of acronyms for many of the words used in this practice and Practice E 1528. The terms are an integral part of both practices and are critical to an understanding of the practices and their use.

3.2 *Definitions:*

3.2.1 *asbestos*—six naturally occurring fibrous minerals found in certain types of rock formations. Of the six, the minerals chrysotile, amosite, and crocidolite have been most commonly used in building products. When mined and processed, asbestos is typically separated into very thin fibers. Because asbestos is strong, incombustible, and corrosion-resistant, asbestos was used in many commercial products beginning early in this century and peaking in the period from World War II into the 1970s. When inhaled in sufficient quantities, asbestos fibers can cause serious health problems.[4,5]

3.2.2 *asbestos containing material (ACM)*—any material or product that contains more than 1 % asbestos.[4]

3.2.3 *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)*—the list of sites compiled by EPA that EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities List.

3.2.4 *construction debris*—concrete, brick, asphalt, and other such building materials discarded in the construction of a building or other improvement to property.

3.2.5 *contaminated public wells*—public wells used for drinking water that have been designated by a government entity as contaminated by toxic substances (e.g., chlorinated solvents), or as having water unsafe to drink without treatment.

3.2.6 *demolition debris*—concrete, brick, asphalt, and other such building materials discarded in the demolition of a building or other improvement to property.

3.2.7 *drum*—a container (typically, but not necessarily, holding 55 gal (208 L) of liquid) that may be used to store *hazardous substances* or *petroleum products*.

3.2.8 *dry wells*—underground areas where soil has been removed and replaced with pea gravel, coarse sand, or large rocks. Dry wells are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional) and wastewater disposal (often illegal).

3.2.9 *dwelling*—structure or portion thereof used for residential habitation.

3.2.10 *environmental lien*—a charge, security, or encumbrance upon title to a *property* to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a *property*, including (but not limited to) liens imposed pursuant to CERCLA 42 USC § 9607(1) and similar state or local laws.

3.2.11 *ERNS list*—EPA's emergency response notification system list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. Notification requirements for such releases or spills are codified in 40 CFR Parts 302 and 355.

3.2.12 *Federal Register, (FR)*—publication of the United States government published daily (except for federal holidays and weekends) containing all proposed and final regulations and some other activities of the federal government. When regulations become final, they are included in the Code of Federal Regulations (CFR), as well as published in the Federal Register.

3.2.13 *fire insurance maps*—maps produced for private fire insurance map companies that indicate uses of properties at specified dates and that encompass the property. These maps are often available at local libraries, historical societies, private resellers, or from the map companies who produced them. See Question 23 of the transaction screen process in Practice E 1528 and 7.3.4.2 of this practice.

3.2.14 *hazardous substance*—A substance defined as a hazardous substance pursuant to CERCLA 42 USC § 9601(14), as interpreted by EPA regulations and the courts: "(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 USC § 7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise

[3] *Annual Book of ASTM Standards*, Vol 11.04.

[4] See EPA, *Managing Asbestos in Place, A Building Owner's Guide to Operations and Maintenance Programs for Asbestos-Containing Materials*, July 1990, p. 2.

[5] See also, for an additional definition of asbestos, ASTM STP 834, ASTM.

specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)." (See Appendix X1.)

3.2.15 *hazardous waste*—any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress). The Solid Waste Disposal Act of 1980 amended RCRA. RCRA defines a hazardous waste, in 42 USC § 6903, as: "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

3.2.16 *landfill*—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *solid waste disposal site* and is also known as a garbage dump, trash dump, or similar term.

3.2.17 *local street directories*—directories published by private (or sometimes government) sources that show ownership, occupancy, and/or use of sites by reference to street addresses. Often local street directories are available at libraries of local governments, colleges or universities, or historical societies. See 7.3.4.6 of this practice.

3.2.18 *material safety data sheet (MSDS)*—written or printed material concerning a hazardous substance which is prepared by chemical manufacturers, importers, and employers for hazardous chemicals pursuant to OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

3.2.19 *National Contingency Plan (NCP)*—the National Oil and Hazardous Substances Pollution Contingency Plan, found at 40 CFR § 300, that is the EPA's blueprint on how hazardous substances are to be cleaned up pursuant to CERCLA.

3.2.20 *National Priorities List (NPL)*—list compiled by EPA pursuant to CERCLA 42 USC § 9605(a)(8)(B) of properties with the highest priority for cleanup pursuant to EPA's Hazard Ranking System. See 40 CFR Part 300.

3.2.21 *occupants*—those tenants, subtenants, or other persons or entities using the *property* or a portion of the *property*.

3.2.22 *owner*—generally the fee owner of record of the *property*.

3.2.23 *petroleum exclusion*—The exclusion from CERCLA liability provided in 42 USC § 9601(14), as interpreted by the courts and EPA: "The term (hazardous substance) does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

3.2.24 *petroleum products*—those substances included within the meaning of the *petroleum exclusion* to CERCLA, 42 USC § 9601(14), as interpreted by the courts and EPA, that is: petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of 42 USC § 9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). (The word fraction refers to certain distillates of crude oil, including gasoline, kerosene, diesel oil, jet fuels, and fuel oil, pursuant to *Standard Definitions of Petroleum Statistics*.[6]

3.2.25 *Phase I Environmental Site Assessment*—the process described in this practice.

3.2.26 *pits, ponds, or lagoons*—man-made or natural depressions in a ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products*. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

3.2.27 *property*—the real property that is the subject of the *environmental site assessment* described in this practice. Real property includes buildings and other fixtures and improvements located on the property and affixed to the land.

3.2.28 *property tax files*—the files kept for property tax purposes by the local jurisdiction where the property is located and includes records of past ownership, appraisals, maps, sketches, photos, or other information that is reasonably ascertainable and pertaining to the property. See 7.3.4.3.

3.2.29 *RCRA generators*—those persons or entities that generate hazardous wastes, as defined and regulated by RCRA.

3.2.30 *RCRA generators list*—list kept by EPA of those persons or entities that generate hazardous wastes as defined and regulated by RCRA.

3.2.31 *RCRA TSD facilities*—those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

3.2.32 *RCRA TSD facilities list*—list kept by EPA of those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

3.2.33 *recorded land title records*—records of fee ownership, leases, land contracts, easements, liens, and other encumbrances on or of the property recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located. (Often such records are kept by a municipal or county recorder or clerk.) Such records may be obtained from title companies or directly from the local government agency. Information about the title to the property that is recorded in a U.S. district court or any place other than where land title records are, by law or custom, recorded for the local jurisdiction in

[6] *Standard Definitions of Petroleum Statistics*, American Petroleum Institute, Fourth Edition, 1988.

which the property is located, are not considered part of recorded land title records. See 7.3.4.4.

3.2.34 *records of emergency release notifications (SARA § 304)*—Section 304 of EPCRA or Title III of SARA requires operators of facilities to notify their local emergency planning committee (as defined in EPCRA) and state emergency response commission (as defined in EPCRA) of any release beyond the facility's boundary of any reportable quantity of any extremely hazardous substance. Often the local fire department is the local emergency planning committee. Records of such notifications are "Records of Emergency Release Notifications" (SARA § 304).

3.2.35 *report*—the written record of a transaction screen process as required by Practice E 1528 or the written report prepared by the environmental professional and constituting part of a "Phase I Environmental Site Assessment," as required by this practice.

3.2.36 *solid waste disposal site*—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *landfill* and is also known as a garbage dump, trash dump, or similar term.

3.2.37 *solvent*—a chemical compound that is capable of dissolving another substance and is itself a *hazardous substance*, used in a number of manufacturing/industrial processes including but not limited to the manufacture of paints and coatings for industrial and household purposes, equipment clean-up, and surface degreasing in metal fabricating industries.

3.2.38 *state registered USTs*—state lists of underground storage tanks required to be registered under Subtitle I, Section 9002 of RCRA.

3.2.39 *sump*—a pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

3.2.40 *TSD facility*—treatment, storage, or disposal facility (see *RCRA TSD facilities*).

3.2.41 *underground storage tank (UST)*—any tank, including underground piping connected to the tank, that is or has been used to contain *hazardous substances* or *petroleum products* and the volume of which is 10 % or more beneath the surface of the ground.

3.2.42 *USGS 7.5 Minute Topographic Map*—the map (if any) available from or produced by the United States Geological Survey, entitled "USGS 7.5 Minute Topographic Map," and showing the property. See 7.3.4.5.

3.2.43 *wastewater*—water that (1) is or has been used in an industrial or manufacturing process, (2) conveys or has conveyed sewage, or (3) is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. Wastewater does not include water originating on or passing through or adjacent to a site, such as stormwater flows, that has not been used in industrial or manufacturing processes, has not been combined with sewage, or is not directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

3.2.44 *zoning/land use records*—those records of the local government in which the *property* is located indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. They are often located in the planning department of a municipality or county. See 7.3.4.8.

3.3 *Descriptions of Terms Specific to This Standard:*

3.3.1 *actual knowledge*—the knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge that is knowledge imputed to an individual or entity.

3.3.2 *adjoining properties*—any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them.

3.3.3 *aerial photographs*—photographs taken from an airplane or helicopter (from a low enough altitude to allow identification of development and activities) of areas encompassing the property. Aerial photographs are often available from government agencies or private collections unique to a local area. See 7.3.4.1 of this practice.

3.3.4 *appropriate inquiry*—that inquiry constituting "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in CERCLA, 42 USC § 9601(35)(B), that will give a party to a *commercial real estate* transaction the *innocent landowner defense* to CERCLA liability (42 USC § 9601(A) and (B) and § 9607(b)(3)), assuming compliance with other elements of the defense. See Appendix X1.

3.3.5 *approximate minimum search distance*—the area for which records must be obtained and reviewed pursuant to Section 7 subject to the limitations provided in that section. This may include areas outside the *property* and shall be measured from the nearest *property* boundary. This term is used in lieu of radius to include irregularly shaped properties.

3.3.6 *building department records*—those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property. Often building department records are located in the building department of a municipality or county. See 7.3.4.7.

3.3.7 *commercial real estate*—any real property except a dwelling or property with no more than four dwelling units exclusively for residential use (except that a dwelling or property with no more than four dwelling units exclusively for residential use is included in this term when it has a commercial function, as in the building of such dwellings for profit). This term includes but is not limited to undeveloped real property and real property used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes; property used for residential purposes that has more than four residential dwelling units; and property with no more than four dwelling units for residential use when it has a commercial function, as in the building of such dwellings for profit.

3.3.8 *commercial real estate transaction*—a transfer of title to or possession of real property or receipt of a security interest in real property, except that it does not include transfer of title to or possession of real property or the receipt of a security interest in real property with respect to an individual dwelling or building containing fewer than five dwelling units, nor does it include the purchase of a lot or

lots to construct a dwelling for occupancy by a purchaser, but a commercial real estate transaction does include real property purchased or leased by persons or entities in the business of building or developing dwelling units.

3.3.9 *due diligence*—the process of inquiring into the environmental characteristics of a parcel of *commercial real estate* or other conditions, usually in connection with a commercial real estate transaction. The degree and kind of due diligence vary for different properties and differing purposes. See Appendix X1.

3.3.10 *environmental audit*—the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe Practice E 1528 or this practice, although an environmental audit may include an *environmental site assessment* or, if prior audits are available, may be part of an environmental site assessment. See Appendix X1.

3.3.11 *environmental professional*—a person possessing sufficient training and experience necessary to conduct a *site reconnaissance, interviews,* and other activities in accordance with this practice, and from the information generated by such activities, having the ability to develop conclusions regarding *recognized environmental conditions* in connection with the *property* in question. An individual's status as an environmental professional may be limited to the type of assessment to be performed or to specific segments of the assessment for which the professional is responsible. The person may be an independent contractor or an employee of the *user.*

3.3.12 *environmental site assessment (ESA)*—the process by which a person or entity seeks to determine if a particular parcel of real *property* (including improvements) is subject to *recognized environmental conditions.* At the option of the user, an environmental site assessment may include more inquiry than that constituting *appropriate inquiry* or, if the user is not concerned about qualifying for the *innocent landowner defense,* less inquiry than that constituting *appropriate inquiry.* See Appendix X1. An environmental site assessment is both different from and less rigorous than an *environmental audit.*

3.3.13 *fill dirt*—dirt, soil, sand, or other earth, that is obtained off-site, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real property. It does not include material that is used in limited quantities for normal landscaping activities.

3.3.14 *hazardous waste/contaminated sites*—sites on which a release has occurred, or is suspected to have occurred, of any *hazardous substance, hazardous waste,* or *petroleum products,* and that release or suspected release has been reported to a government entity.

3.3.15 *innocent landowner defense*—that defense to CERCLA liability provided in 42 USC § 9601(35) and § 9607(b)(3). One of the requirements to qualify for this defense is that the party make "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice." There are additional requirements to qualify for this defense. See Appendix X1.

3.3.16 *interviews*—those portions of this practice that are contained in Section 9 and 10 thereof and address questions to be asked of *owners* and *occupants* of the *property* and questions to be asked of local government officials.

3.3.17 *key site manager*—the person identified by the *owner* of a *property* as having good knowledge of the uses and physical characteristics of the property. See 9.5.1.

3.3.18 *local government agencies*—those agencies of municipal or county government having jurisdiction over the *property.* Municipal and county government agencies include but are not limited to cities, parishes, townships, and similar entities.

3.3.19 *LUST sites*—state lists of leaking underground storage tank sites. Section 9003 (h) of Subtitle I of RCRA gives EPA and states, under cooperative agreements with EPA, authority to clean up releases from UST systems or require owners and operators to do so.

3.3.20 *major occupants*—those tenants, subtenants, or other persons or entities each of which uses at least 40 % of the leasable area of the *property* or any anchor tenant when the *property* is a shopping center.

3.3.21 *obvious*—that which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while *visually or physically observing the property.*

3.3.22 *other historical sources*—any source or sources other than those designated in 7.3.4.1 through 7.3.4.8 that are credible to a reasonable person and that identify past uses of the property. The term includes, but is not limited to: miscellaneous maps, newspaper archives, and records in the files and/or personal knowledge of the *property owner* and/or *occupants.* See 7.3.4.9.

3.3.23 *physical setting sources*—sources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a *property.* See 7.2.3.

3.3.24 *practically reviewable*—information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the *property* without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the user can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the *property* or a geographic area in which the *property* is located are not generally *practically reviewable.* Most databases of public records are *practically reviewable* if they can be obtained from the source agency by the county, city, zip code, or other geographic area of the facilities listed in the record system. Records that are sorted, filed, organized, or maintained by the source agency only chronologically are not generally practically reviewable. For large databases with numerous facility records (such as RCRA hazardous waste generators and registered underground storage tanks), the records are not *practically reviewable* unless they can be obtained from the source agency in the smaller geographic area of zip codes. Even when information is provided by zip code for some large databases, it is common for an unmanageable number of sites to be identified within a given zip code. In these cases, it is not necessary to review the impact of all of the sites that are likely to be listed in any given zip code because that information would not be *practically reviewable.* In other words, when so much data is generated that it cannot be feasibly reviewed for its impact on the *property,* it is not

practically reviewable.

3.3.25 *preparer*—the person preparing the *transaction screen questionnaire* pursuant to Practice E 1528, who may be either the user or the person to whom the user has delegated the preparation of the *transaction screen questionnaire.*

3.3.26 *publicly available*—information that is publicly available means that the source of the information allows access to the information by anyone upon request.

3.3.27 *reasonably ascertainable*—for purposes of both this practice and Practice E 1528, information that is (1) *publicly available,* (2) obtainable from its source within reasonable time and cost constraints, and (3) *practically reviewable.*

3.3.28 *recognized environmental conditions*—the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, groundwater, or surface water of the *property.* The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

3.3.29 *records review*—that part that is contained in Section 7 of this practice addresses which records shall or may be reviewed.

3.3.30 *site reconnaissance*—that part that is contained in Section 8 of this practice and addresses what should be done in connection with the *site visit.* The site reconnaissance includes, but is not limited to, the *site visit* done in connection with such a Phase I Environmental Site Assessment.

3.3.31 *site visit*—the visit to the property during which observations are made constituting the *site reconnaissance* section of this practice and the *site visit* requirement of Practice E 1528.

3.3.32 *standard environmental record sources*—those records specified in 7.2.1.1.

3.3.33 *standard historical sources*—those sources of information about the history of uses of property specified in 7.3.4.

3.3.34 *standard physical setting source*—a current USGS 7.5 minute topographic map (if any) showing the area on which the property is located. See 7.2.3.

3.3.35 *standard practice(s)*—the activities set forth in either and both this practice and Practice E 1528.

3.3.36 *standard sources*—sources of environmental, physical setting, or historical records specified in Section 7 of this practice.

3.3.37 *transaction screen process*—the process described in Practice E 1528.

3.3.38 *transaction screen questionnaire*—the questionnaire provided in Section 6 of Practice E 1528.

3.3.39 *user*—the party seeking to use Practice E 1528 to perform an *environmental site assessment* of the *property.* A user may include, without limitation, a purchaser of *property,* a potential tenant of property, an *owner* of *property,* a lender, or a property manager.

3.3.40 *visually and/or physically observed*—during a *site visit* pursuant to Practice E 1528, or pursuant to this practice, this term means observations made by vision while walking through a *property* and the structures located on it and observations made by the sense of smell, particularly observations of noxious or foul odors. The term "walking through" is not meant to imply that disabled persons who cannot physically walk may not conduct a *site visit*; they may do so by the means at their disposal for moving through the *property* and the structures located on it.

3.4 *Acronyms:*

3.4.1 *ASTM*—American Society for Testing and Materials.

3.4.2 *CERCLA*—Comprehensive Environmental Response, Compensation and Liability Act of 1980 (as amended, 42 USC § 9601 *et seq.*).

3.4.3 *CERCLIS*—Comprehensive Environmental Response, Compensation and Liability Information System (maintained by EPA).

3.4.4 *CFR*—Code of Federal Regulations.

3.4.5 *EPA*—United States Environmental Protection Agency.

3.4.6 *EPCRA*—Emergency Planning and Community Right to Know Act ((also known as SARA Title III), 42 USC § 11001 *et seq.*).

3.4.7 *ERNS*—emergency response notification system.

3.4.8 *ESA*—environmental site assessment (different than an *environmental audit*; see 3.3.12).

3.4.9 *FOIA*—U.S. Freedom of Information Act (5 USC 552 *et seq.*).

3.4.10 *FR*—Federal Register.

3.4.11 *LUST*—leaking underground storage tank.

3.4.12 *MSDS*—material safety data sheet.

3.4.13 *NCP*—National Contingency Plan.

3.4.14 *NPDES*—national pollution discharge elimination system.

3.4.15 *NPL*—national priorities list.

3.4.16 *PCBs*—polychlorinated biphenyls.

3.4.17 *PRP*—potentially responsible party (pursuant to CERCLA 42 USC § 9607(a)).

3.4.18 *RCRA*—Resource Conservation and Recovery Act (as amended, 42 USC § 6901 *et seq.*).

3.4.19 *SARA*—Superfund Amendments and Reauthorization Act of 1986 (amendment to CERCLA).

3.4.20 *USC*—United States Code.

3.4.21 *USGS*—United States Geological Survey.

3.4.22 *UST*—underground storage tank.

4. Significance and Use

4.1 *Uses*—This practice is intended for use on a voluntary basis by parties who wish to assess the environmental condition of *commercial real estate.* While use of this practice is intended to constitute *appropriate inquiry* for purposes of CERCLA's *innocent landowner defense,* it is not intended that its use be limited to that purpose. This practice is intended primarily as an approach to conducting an inquiry designed to identify *recognized environmental conditions* in connection with a *property,* and *environmental site assessments* that are both more and less comprehensive than this practice (including, in some instances, no *environmental*

site assessment) may be appropriate in some circumstances. Further, no implication is intended that a person must use this practice in order to be deemed to have conducted inquiry in a commercially prudent or reasonable manner in any particular transaction. Nevertheless, this practice is intended to reflect a commercially prudent and reasonable inquiry.

4.2 *Clarifications on Use:*

4.2.1 *Use Not Limited to CERCLA*—This practice and Practice E 1528 are designed to assist the *user* in developing information about the environmental condition of a *property* and as such has utility for a wide range of persons, including those who may have no actual or potential CERCLA liability and/or may not be seeking the *innocent landowner defense.*

4.2.2 *Residential Tenants/Purchasers and Others*—No implication is intended that it is currently customary practice for residential tenants of multifamily residential buildings, tenants of single-family homes or other residential real estate, or purchasers of dwellings for one's own residential use, to conduct an *environmental site assessment* in connection with these transactions. Thus, these transactions are not included in the term commercial real estate transactions, and it is not intended to imply that such persons are obligated to conduct an *environmental site assessment* in connection with these transactions for purposes of *appropriate inquiry* or for any other purpose. In addition, no implication is intended that it is currently customary practice for *environmental site assessments* to be conducted in other unenumerated instances (including but not limited to many commercial leasing transactions, many acquisitions of easements, and many loan transactions in which the lender has multiple remedies). On the other hand, anyone who elects to do an *environmental site assessment* of any *property* or portion of a property may, in such person's judgment, use either this practice or Practice E 1528.

4.2.3 *Site-Specific*—This practice is site-specific in that it relates to assessment of environmental conditions on a specific parcel of *commercial real estate.* Consequently, this practice does not address many additional issues raised in transactions such as purchases of business entities, or interests therein, or of their assets, that may well involve environmental liabilities pertaining to properties previously owned or operated or other off-site environmental liabilities.

4.3 *Two Related Practices*—This practice sets forth one procedure for an *environmental site assessment* known as a "Phase I Environmental Site Assessment" or a "Phase I ESA" or simply a "Phase I." This practice is a companion to Practice E 1528. These practices are each intended to meet the standard of *appropriate inquiry* necessary to qualify for the *innocent landowner defense.* It is essential to consider that these practices, taken together, provide for two alternative practices of *appropriate inquiry.*

4.3.1 *Election to Commence with Either Practice*—The *user* may commence inquiry to identify *recognized environmental conditions* in connection with a *property* by performing either the *transaction screen process*, or the Phase I Environmental Site Assessment given in this practice.

4.3.2 *Who May Conduct*—The *transaction screen process* may be conducted either by the *user* (including an agent or employee of the user) or wholly or partially by an *environmental professional.* The *transaction screen process* does not require the judgment of an *environmental professional.* Whenever a Phase I Environmental Site Assessment is conducted, it must be performed by an *environmental professional* to the extent specified in 6.5.1. Further, at the Phase I Environmental Site Assessment level, no practical standard can be designed to eliminate the role of judgment and the value and need for experience in the party performing the inquiry. The professional judgment of an *environmental professional* is, consequently, vital to the performance of appropriate inquiry at the Phase I Environmental Site Assessment level.

4.4 *Additional Services*—As set forth in 11.9, additional services may be contracted for between the *user* and the *environmental professional.*

4.5 *Principles*—The following principles are an integral part of both practices and are intended to be referred to in resolving any ambiguity or exercising such discretion as is accorded the *user* or *environmental professional* in performing an *environmental site assessment* or in judging whether a *user* or *environmental professional* has conducted *appropriate inquiry* or has otherwise conducted an adequate *environmental site assessment.*

4.5.1 *Uncertainty Not Eliminated*—No *environmental site assessment* can wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a *property.* Performance of this practice or E 1528 is intended to reduce, but not eliminate, uncertainty regarding the potential for *recognized environmental conditions* in connection with a property, and both practices recognize reasonable limits of time and cost.

4.5.2 *Not Exhaustive—Appropriate inquiry* does not mean an exhaustive assessment of a clean *property.* There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an *environmental site assessment* and the reduction of uncertainty about unknown conditions resulting from additional information.

4.5.3 *Level of Inquiry Is Variable*—Not every *property* will warrant the same level of assessment. Consistent with good commercial or customary practice, the appropriate level of *environmental site assessment* will be guided by the type of *property* subject to assessment, the expertise and risk tolerance of the *user*, and the information developed in the course of the inquiry.

4.5.4 *Comparison With Subsequent Inquiry*—It should not be concluded or assumed that an inquiry was not *appropriate inquiry* merely because the inquiry did not identify *recognized environmental conditions* in connection with a *property. Environmental site assessments* must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent *environmental site assessments* should not be considered valid standards to judge the appropriateness of any prior assessment based on hindsight, new information, use of developing technology or analytical techniques, or other factors.

4.6 *Continued Viability of Environmental Site Assess-*

ment—An *environmental site assessment* meeting or exceeding either Practice E 1528 or this practice and completed less than 180 days previously is presumed to be valid. An *environmental site assessment* meeting or exceeding either practice and completed more than 180 days previously may be used to the extent allowed by 4.7 through 4.7.5.

4.7 *Prior Assessment Usage*—Both Practice E 1528 and this practice recognize that *environmental site assessments* performed in accordance with these practices will include information that subsequent *users* may want to use to avoid undertaking duplicative assessment procedures. Therefore, the practices describe procedures to be followed to assist users in determining the appropriateness of using information in *environmental site assessments* performed previously. The system of prior assessment usage is based on the following principles that should be adhered to in addition to the specific procedures set forth elsewhere in these practices:

4.7.1 *Use of Prior Information*—Subject to 4.7.4, *users* and *environmental professionals* may use information in prior *environmental site assessments* provided such information was generated as a result of procedures that meet or exceed the requirements of this practice or Practice E 1528 and then only provided that the specific procedures set forth in the appropriate practice are met.

4.7.2 *Prior Assessment Meets or Exceeds*—Subject to 4.7.4, a prior *environmental site assessment* may be used in its entirety, without regard to the specific procedures set forth in these practices, if, in the reasonable judgment of the *user*: the prior *environmental site assessment* meets or exceeds the requirements of Practice E 1528 or this practice and the conditions at the *property* likely to affect *recognized environmental conditions* in connection with the *property* are not likely to have changed materially since the prior *environmental site assessment* was conducted. In making this judgment, the *user* should consider the type of *property* assessed and the conditions in the area surrounding the *property*.

4.7.3 *Current Investigation*—Except as provided in 4.7.2 and 4.7.2 of Practice E 1528 prior *environmental site assessments* should not be used without current investigation of conditions likely to affect *recognized environmental conditions* in connection with the *property* that may have changed materially since the prior *environmental site assessment* was conducted. At a minimum, for a Phase I Environmental Site Assessment consistent with this practice, a new *site reconnaissance*, interviews, and an update of the *records review* should be performed.

4.7.4 *Actual Knowledge Exception*—If the *user* or *environmental professional(s)* conducting an *environmental site assessment* has *actual knowledge* that the information being used from a prior *environmental site assessment* is not accurate or if it is *obvious*, based on other information obtained by means of the *environmental site assessment* or known to the person conducting the *environmental site assessment*, that the information being used is not accurate, such information from a prior *environmental site assessment* may not be used.

4.7.5 *Contractual Issues Regarding Prior Assessment Usage*—The contractual and legal obligations between prior and subsequent *users* of *environmental site assessments* or between *environmental professionals* who conducted prior *environmental site assessments* and those who would like to use such prior *environmental site assessments* are beyond the scope of this practice.

4.8 *Rules of Engagement*—The contractual and legal obligations between an *environmental professional* and a *user* (and other parties, if any) are outside the scope of this practice. No specific legal relationship between the *environmental professional* and the user is necessary for the *user* to meet the requirements of this practice.

5. User's Responsibilities

5.1 *Scope*—The purpose of this section is to describe tasks that will help identify the possibility of *recognized environmental conditions* in connection with the *property*. These tasks do not require the technical expertise of an *environmental professional* and are generally not performed by *environmental professionals* performing a Phase I Environmental Site Assessment. They may be performed by the *user*.

5.2 *Checking Title Records for Environmental Liens*—*Reasonably ascertainable recorded land title records* (see 7.3.4.4) should be checked to identify *environmental liens*, if any, that are currently recorded against the *property*. Any *environmental liens* so identified shall be reported to the *environmental professional* conducting a Phase I Environmental Site Assessment. This practice does not impose on the *environmental professional* the responsibility to check for recorded *environmental liens*. Rather the *user* should check or engage a title company or title professional to check *reasonably ascertainable recorded land title records* for *environmental liens* currently recorded against the *property*.

5.2.1 *Reasonably Ascertainable*—Environmental liens that are unrecorded or are recorded any place other than *recorded land title records* are not considered to be in *recorded land title records* that are *reasonably ascertainable*. *Recorded land title records* need not be checked if they otherwise do not meet the definition of the term *reasonably ascertainable*.

5.3 *Specialized Knowledge or Experience of the User*—If the *user* is aware of any specialized knowledge or experience that is material to *recognized environmental conditions* in connection with the *property*, it is the user's responsibility to communicate any information based on such specialized knowledge or experience to the *environmental professional*. The *user* should do so before the *environmental professional* does the *site reconnaissance*.

5.4 *Reason for Significantly Lower Purchase Price*—In a transaction involving the purchase of a parcel of *commercial real estate*, if a user has *actual knowledge* that the purchase price of the *property* is significantly less than the purchase price of comparable properties, the *user* should try to identify an explanation for the lower price and to make a written record of such explanation. Among the factors to consider will be the information that becomes known to the *user* pursuant to the Phase I Environmental Site Assessment.

6. Phase I Environmental Site Assessment

6.1 *Objective*—The purpose of this Phase I Environmental Site Assessment is to identify, to the extent feasible pursuant to the processes prescribed herein, recognized environmental conditions in connection with the property. (See 1.1.1.)

6.2 *Four Components*—A Phase I Environmental Site Assessment shall have four components, as described as follows:

6.2.1 *Records Review*—Review of records; see Section 7,

6.2.2 *Site Reconnaissance*—A visit to the property; see Section 8,

6.2.3 *Interviews:*

6.2.3.1 Interviews with current *owners* and *occupants* of the property; see Section 9, and

6.2.3.2 Interviews with local government officials; see Section 10, and

6.2.4 *Report*—Evaluation and report; see Section 11.

6.3 *Coordination of Parts:*

6.3.1 *Parts Used in Concert*—The *records review, site reconnaissance,* and *interviews* are intended to be used in concert with each other. If information from one source indicates the need for more information, other sources may be available to provide information. For example, if a previous use of the *property* as a gasoline station is identified through the *records review,* but the present *owner* and *occupants* interviewed report no knowledge of an underground storage tank, the person conducting the *site reconnaissance* should be alert for signs of the presence of an underground storage tank.

6.3.2 *User Obligations*—The *environmental professional* shall note in the report whether or not the *user* has reported to the *environmental professional* any *environmental liens* encumbering the *property* or any specialized knowledge or experience of the *user* that would provide important information about previous ownership or uses of the *property* that may be material to identifying *recognized environmental conditions.*

6.4 *No Sampling*—This practice does not include any testing or sampling of materials (e.g., soil, water, air, building materials).

6.5 *Who May Conduct a Phase I:*

6.5.1 *Environmental Professional's Duties*—The *interviews* and *site reconnaissance,* as well as review and interpretation of information upon which the report is based and overseeing the writing of the report, are all portions of a Phase I Environmental Site Assessment that shall be performed by an *environmental professional* or *environmental professionals.* If more than one environmental professional is involved in these tasks, they shall coordinate their efforts.

6.5.2 *Environmental Professional Supervision*—Information for the *records review* needed for completion of a Phase I Environmental Site Assessment may be provided by a number of parties including government agencies, third-party vendors, the *user,* and present and past *owners* and *occupants* of the *property,* provided that the information is obtained by or under the supervision of an *environmental professional* or is obtained by a third-party vendor specializing in retrieval of the information specified in Section 7. Prior assessments may also contain information that will be appropriate for usage in a current *environmental site assessment* provided the prior usage procedures set forth in Sections 7, 8, and 9 are followed. The *environmental professional(s)* participating in the *site reconnaissance* and responsible for the report shall review all of the information provided.

6.5.2.1 *Reliance*—An environmental professional is not required to verify independently the information provided but may rely on information provided unless he or she has *actual knowledge* that certain information is incorrect or unless it is *obvious* that certain information is incorrect based on other information obtained in the Phase I Environmental Site Assessment or otherwise actually known to the *environmental professional.*

7. Records Review

7.1 *Introduction:*

7.1.1 *Objective*—The purpose of the *records review* is to obtain and review records that will help identify *recognized environmental conditions* in connection with the *property.*

7.1.2 *Approximate Minimum Search Distance*—Some records to be reviewed pertain not just to the *property* but also pertain to properties within an additional *approximate minimum search distance* in order to help assess the likelihood of problems from migrating *hazardous substances* or *petroleum products.* When the term *approximate minimum search distance* includes areas outside the *property,* it shall be measured from the nearest *property* boundary. The term *approximate minimum search distance* is used in lieu of radius in order to include irregularly shaped properties.

7.1.2.1 *Reduction of Approximate Minimum Search Distance*—When allowed by 7.2.1.1, the *approximate minimum search distance* for a particular record may be reduced in the discretion of the environmental professional. Factors to consider in reducing the *approximate minimum search distance* include: (1) the density (e.g., urban, rural, or suburban) of the setting in which the *property* is located; (2) the distance that the *hazardous substances* or *petroleum products* are likely to migrate based on local geologic or hydrogeologic conditions; and (3) other reasonable factors. The justification for each reduction and the *approximate minimum search distance* actually used for any particular record shall be explained in the report. If the *approximate minimum search distance* is specified as "property only," then the search shall be limited to the *property* and may not be reduced unless the particular record is not *reasonably ascertainable.*

7.1.3 *Accuracy and Completeness*—Accuracy and completeness of record information varies among information sources, including governmental sources. Record information is often inaccurate or incomplete. The *user* or *environmental professional* is not obligated to identify mistakes or insufficiencies in information provided. However, the *environmental professional* reviewing records shall make a reasonable effort to compensate for mistakes or insufficiencies in the information reviewed that are *obvious* in light of other information of which the *environmental professional* has *actual knowledge.*

7.1.4 *Reasonably Ascertainable/Standard Sources*—Availability of record information varies from information source to information source, including governmental jurisdictions. The *user* or *environmental professional* is not obligated to identify, obtain, or review every possible record that might exist with respect to a *property.* Instead, this practice identifies record information that shall be reviewed from standard sources, and the *user* or *environmental professional* is required to review only record information that is reasonably ascertainable from those standard sources.

Record information that is *reasonably ascertainable* means (1) information that is publicly available, (2) information that is obtainable from its source within reasonable time and cost constraints, and (3) information that is *practically reviewable.*

7.1.4.1 *Publicly Available*—Information that is *publicly available* means that the source of the information allows access to the information by anyone upon request.

7.1.4.2 *Reasonable Time and Cost*—Information that is obtainable within reasonable time and cost constraints means that the information will be provided by the source within 20 days of receiving a written, telephone, or in-person request at no more than a nominal cost intended to cover the source's cost of retrieving and duplicating the information. Information that can only be reviewed by a visit to the source is *reasonably ascertainable* if the visit is permitted by the source within 20 days of request.

7.1.4.3 *Practically Reviewable*—Information that is *practically reviewable* means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the *property* without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the *user* can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the *property* or a geographic area in which the *property* is located are not generally *practically reviewable.* Most databases of public records are practically reviewable if they can be obtained from the source agency by the county, city, zip code, or other geographic area of the facilities listed in the record system. Records that are sorted, filed, organized, or maintained by the source agency only chronologically are not generally *practically reviewable.* For large databases with numerous facility records (such as RCRA generators and registered USTs), the records are not *practically reviewable* unless they can be obtained from the source agency in the smaller geographic area of zip codes. Even when information is provided by zip code for some large databases, it is common for an unmanageable number of sites to be identified within a given zip code. In these cases, it is not necessary to review the impact of all of the sites that are likely to be listed in any given zip code because that information would not be *practically reviewable.* In other words, when so much data is generated that it cannot be feasibly reviewed for its impact on the *property*, it is not required to be reviewed.

7.1.5 *Alternatives to Standard Sources*—Alternative sources may be used in lieu of standard sources if they are of similar or better reliability and detail, or if a *standard source* is not *reasonably ascertainable.*

7.1.6 *Coordination*—If records are not *reasonably ascertainable* from *standard sources* or alternative sources, the *environmental professional* shall attempt to obtain the requested information by other means specified in this practice such as questions posed to the current *owner* or *occupant(s)* of the *property* or appropriate persons available at the source at the time of the request.

7.1.7 *Sources of Standard Source Information*—*Standard source* information or other record information from government agencies may be obtained directly from appropriate government agencies or from commercial services. Government information obtained from nongovernmental sources may be considered current if the source updates the information at least every 90 days or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public.

7.1.8 *Documentation of Sources Checked*—The report shall document each source that was used, even if a source revealed no findings. Sources shall be sufficiently documented, including name, date request for information was filled, date information provided was last updated by source, date information was last updated by original source (if provided other than by original source; see 7.1.7) so as to facilitate reconstruction of the research at a later date.

7.1.9 *Significance*—If a standard *environmental record source* (or other sources in the course of conducting the *Phase I Environmental Site Assessment*) identifies the *property* or another site within the *approximate minimum search distance*, the report shall include the *environmental professional's* judgment about the significance of the listing to the analysis of *recognized environmental conditions* in connection with the *property* (based on the data retrieved pursuant to 7.2, additional information from the government source, or other sources of information). In doing so, the *environmental professional* may make statements applicable to multiple sites (for example, a statement to the effect that none of the sites listed is likely to have a negative impact on the property except . . .).

7.2 *Environmental Information:*

7.2.1 *Standard Environmental Sources*—The following *standard environmental record sources* shall be reviewed, subject to the conditions of 7.1.1 through 7.1.7:

7.2.1.1 *Standard Environmental Record Sources: Federal and State*—The *approximate minimum search distance* may be reduced, pursuant to 7.1.2.1, for any of these *standard environmental record sources* except the Federal NPL site list and Federal RCRA TSD list.

	Approximate Minimum Search Distance, miles (kilometres)
Federal NPL site list	1.0 (1.6)
Federal CERCLIS list	0.5 (0.8)
Federal RCRA TSD facilities list	1.0 (1.6)
Federal RCRA generators list	property and adjoining properties
Federal ERNS list	property only
State lists of hazardous waste sites Identified for investigation or remediation (NPL and CERCLIS equivalents)	1.0 (1.6)
State landfill and/or solid waste disposal site lists	0.5 (0.8)
State leaking UST lists	0.5 (0.8)
State registered UST lists	property and adjoining properties

7.2.2 *Additional Environmental Record Sources: State or Local*—One or more additional state sources or local sources of environmental records may be checked, in the discretion of the *environmental professional*, to enhance and supplement federal and state sources identified above. Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are *reasonably ascertainable*, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the *records review* (see 7.1.1), and (3) whether they are generally obtained, pursuant to local good commercial or customary practice, in initial *environmental site assessments* in the type

of *commercial real estate* transaction involved. To the extent additional state sources or local sources are used to supplement the same record types listed above, *approximate minimum search distances* should not be less than those specified above (adjusted as provided in 7.2.1.1 and 7.1.2.1). Some types of records and sources that may be useful include:

Types of Local Records

Lists of Landfill/Solid Waste Disposal Sites
Lists of Hazardous Waste/Contaminated Sites
Lists of Registered Underground Storage Tanks
Records of Emergency Release Reports (SARA § 304)
Records of Contaminated Public Wells

Local Sources

Department of Health/Environmental Division
Fire Department
Planning Department
Building Permit/Inspection Department
Local/Regional Pollution Control Agency
Local/Regional Water Quality Agency
Local Electric Utility Companies (for records relating to PCBs)

7.2.3 *Physical Setting Sources*—A current USGS 7.5 Minute Topographic Map showing the area on which the *property* is located shall be reviewed, provided it is *reasonably ascertainable*. It is the only *standard physical setting source* and the only *physical setting source* that is required to be obtained (and only if it is *reasonably ascertainable*). One or more additional *physical setting sources* may be obtained in the discretion of the *environmental professional*. Because such sources provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a site, discretionary *physical setting sources* shall be sought when (1) conditions have been identified in which *hazardous substances* or *petroleum products* are likely to migrate to the *property* or from or within the *property* into the groundwater or soil and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map is generally obtained, pursuant to local good commercial or customary practice in initial *environmental site assessments* in the type of *commercial real estate transaction* involved, in order to assess the impact of such migration on *recognized environmental conditions* in connection with the *property*.

Mandatory Standard Physical Setting Source

USGS—Current 7.5 Minute Topographic Map

Discretionary and Non-Standard Physical Setting Sources

USGS and/or State Geological Survey—Groundwater Maps
USGS and/or State Geological Survey—Bedrock Geology Maps
USGS and/or State Geological Survey—Surficial Geology Maps
Soil Conservation Service—Soil Maps
Other Physical Setting Sources that are reasonably credible (as well as reasonably ascertainable)

7.3 *Historical Use Information:*

7.3.1 *Objective*—The objective of consulting historical sources is to develop a history of the previous uses of the *property* and surrounding area, in order to help identify the likelihood of past uses having led to *recognized environmental conditions* in connection with the *property*.

7.3.2 *Uses of the Property*—All *obvious* uses of the *property* shall be identified from the present, back to the *property's obvious* first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the *standard historical sources* in 7.3.4.1 through 7.3.4.8 as are necessary and both *reasonably ascertainable* and likely to be useful (as defined under *Data Failure* in 7.3.2.3). For example, if the *property* was developed in the 1700's, it might be feasible to identify uses back to the early 1900's, using sources such as *fire insurance maps* or *USGS 7.5 minute topographic maps*. Although other sources such as *recorded land title records* might go back to the 1700's, it would not be required to review them unless they were both *reasonably ascertainable* and likely to be useful. As another example, if the *property* was reportedly not developed until 1960, it would still be necessary to confirm that it was undeveloped back to 1940. Such confirmation may come from one or more of the *standard historical sources* specified in 7.3.4.1 through 7.3.4.8, or it may come from *other historical sources* (such as someone with personal knowledge of the *property*; see 7.3.4.9). However, checking other historical sources (see 7.3.4.9) would not be required. For purposes of 7.3.2, the term "developed use" includes agricultural uses and placement of fill. The report shall describe all identified uses, justify the earliest date identified (for example, records showed no development of the *property* prior to the specific date), and explain the reason for any gaps in the history of use (for example, *data failure*).

7.3.2.1 *Intervals*—Review of *standard historical sources* at less than approximately five year intervals is not required by this practice (for example, if the *property* had one use in 1950 and another use in 1955, it is not required to check for a third use in the intervening period). If the specific use of the *property* appears unchanged over a period longer than five years, then it is not required by this practice to research the use during that period (for example, if *fire insurance maps* show the same apartment building in 1940 and 1960, then the period in between need not be researched).

7.3.2.2 *General Type of Use*—In identifying previous uses, more specific information about uses is more helpful than less specific information, but it is sufficient, for purposes of 7.3.2, to identify the general type of use (for example: office, retail, and residential) unless it is *obvious* from the source(s) consulted that the use may be more specifically identified. However, if the general type of use is industrial or manufacturing (for example, *zoning/land use records* show industrial zoning), then additional *standard historical sources* should be reviewed if they are likely to identify a more specific use and are *reasonably ascertainable*, subject to the constraints of *data failure* (see 7.3.2.3).

7.3.2.3 *Data Failure*—A *standard historical source* may be excluded *(1)* if the source is not *reasonably ascertainable*, or *(2)* if past experience indicates that the source is not likely to be sufficiently useful, accurate, or complete in terms of satisfying 7.3.2. *Other historical sources* specified in 7.3.4.9 may be used to satisfy 7.3.2, 7.3.2.1, and 7.3.2.2, but are not required to comply with this practice. Whatever history of previous uses is derived from checking the *standard historical sources* specified in 7.3.4.1 through 7.3.4.8 (except those excluded by *(1)* and *(2)* of 7.3.2.3) shall be deemed sufficient historical use information to comply with this practice.

7.3.3 *Uses of Properties in Surrounding Area*—Uses in the area surrounding the *property* shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the *property* itself (for example, an *aerial photograph* or *fire insurance map* of the *property* will usually show the surrounding area). If the *environmental professional* uses sources that include the surrounding area, surrounding uses should be identified to a distance determined at the discretion of the *environmental professional* (for example, if an aerial photo shows the area surrounding the *property*, then the *environmental professional* shall determine how far out from the *property* the photo should be analyzed). Factors to consider in making this determination include, but are not limited to: the extent to which information is *reasonably ascertainable*; the time and cost involved in reviewing surrounding uses (for example, analyzing *aerial photographs* is relatively quick, but reviewing *property tax files* for adjacent properties or reviewing *local street directories* for more than the few streets that surround the site is typically too time-consuming); the extent to which information is useful, accurate, and complete in light of the purpose of the records review (see 7.1.1); the likelihood of the information being significant to *recognized environmental conditions* in connection with the *property*; the extent to which potential concerns are *obvious*; known hydrogeologic/geologic conditions that may indicate a high probability of *hazardous substances* or *petroleum products* migration to the property; how recently local development has taken place; information obtained from *interviews* and other sources; and local good commercial or customary practice.

7.3.4 *Standard Historical Sources:*

7.3.4.1 *Aerial Photographs*—The term "aerial photographs" means photographs taken from an airplane or helicopter (from a low enough altitude to allow identification of development and activities) of areas encompassing the *property*. Aerial photographs are often available from government agencies or private collections unique to a local area.

7.3.4.2 *Fire Insurance Maps*—The term *fire insurance maps* means maps produced by private fire insurance map companies that indicate uses of properties at specified dates and that encompass the *property*. These maps are often available at local libraries, historical societies, private resellers, or from the map companies who produced them.

7.3.4.3 *Property Tax Files*—The term *property tax files* means the files kept for property tax purposes by the local jurisdiction where the *property* is located and includes records of past ownership, appraisals, maps, sketches, photos, or other information that is *reasonably ascertainable* and pertaining to the *property*.

7.3.4.4 *Recorded Land Title Records*—The term *recorded land title records* means records of fee ownership, leases, land contracts, easements, liens, and other encumbrances on or of the *property* recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located. (Often such records are kept by a municipal or county recorder or clerk.) Such records may be obtained from title companies or directly from the local government agency. Information about the title to the *property* that is recorded in a U.S. district court or any place other than where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located, are not considered part of recorded land title records, because often this source will provide only names of previous owners, lessees, easement holders, etc. and little or no information about uses or occupancies of the *property*, but when employed in combination with another source recorded land title records may provide helpful information about uses of the *property*. *This source cannot be the sole historical source consulted. If this source is consulted, at least one additional standard historical source must also be consulted.*

7.3.4.5 *USGS 7.5 Minute Topographic Maps*—The term *USGS 7.5 Minute Topographic Maps* means the map (if any) available from or produced by the United States Geological Survey, entitled "USGS 7.5 minute topographic map," and showing the property.

7.3.4.6 *Local Street Directories*—The term *local street directories* means directories published by private (or sometimes government) sources and showing ownership and/or use of sites by reference to street addresses. Often local street directories are available at libraries of local governments, colleges or universities, or historical societies.

7.3.4.7 *Building Department Records*—The term *building department records* means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property. Often building department records are located in the *building department* of a municipality or county.

7.3.4.8 *Zoning/Land Use Records*—The term *zoning/land use records* means those records of the local government in which the property is located indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. They are often located in the *planning department* of a municipality or county.

7.3.4.9 *Other Historical Sources*—The term *other historical sources* means any source or sources other than those designated in 7.3.4.1 through 7.3.4.8 that are credible to a reasonable person and that identify past uses of the *property*. This category includes, but is not limited to: miscellaneous maps, newspaper archives, and records in the files and/or personal knowledge of the property *owner* and/or *occupants*.

7.4 *Prior Assessment Usage—Standard historical sources* reviewed as part of a prior *environmental site assessment* do not need to be searched for or reviewed again, but uses of the *property* since the prior *environmental site assessment* should be identified either through *standard historical sources* (as specified in 7.3) or by alternatives to *standard historical sources*, to the extent such information is reasonably ascertainable. (See 4.7.)

8. Site Reconnaissance

8.1 *Objective*—The objective of the *site reconnaissance* is to obtain information indicating the likelihood of identifying *recognized environmental* conditions in connection with the property.

8.2 *Observation*—On a visit to the *property* (the *site visit*), the *environmental professional* shall *visually and physically* observe the *property* and any structure(s) located on the *property* to the extent not obstructed by bodies of water,

adjacent buildings, or other obstacles.

8.2.1 *Exterior*—The periphery of the *property* shall be *visually and physically observed*, as well as the periphery of all structures on the property, and the *property* should be viewed from all adjacent public thoroughfares. If roads or paths with no apparent outlet are observed on the *property*, the use of the road or path should be identified to determine whether it was likely to have been used as an avenue for disposal of *hazardous substances* or *petroleum products*.

8.2.2 *Interior*—On the interior of structures on the *property*, accessible common areas expected to be used by *occupants* or the public (such as lobbies, hallways, utility rooms, recreation areas, etc.), maintenance and repair areas, including boiler rooms, and a representative sample of *occupant* spaces, should be *visually and physically observed*. It is not necessary to look under floors, above ceilings, or behind walls.

8.2.3 *Methodology*—The *environmental professional* shall document, in the report, the method used (e.g., grid patterns or other systematic approaches used for large properties, which spaces for *owner* or *occupants* were observed) to observe the *property*.

8.2.4 *Limitations*—The *environmental professional* shall document, in the report, general limitations and bases of review, including limitations imposed by physical obstructions such as adjacent buildings, bodies of water, asphalt, or other paved areas, and limiting conditions (e.g., snow, rain).

8.2.5 *Frequency*—It is not expected that more than one visit to the *property* shall be made by the *environmental professional* in connection with a *Phase I Environmental Site Assessment*. The one visit constituting part of the *Phase I Environmental Site Assessment* may be referred to as the *site visit*.

8.3 *Prior Assessment Usage*—The information supplied in connection with the *site reconnaissance* portion of a prior *environmental site assessment* may be used for guidance but shall not be relied upon without determining through a new *site reconnaissance* whether any conditions that are material to *recognized environmental conditions* in connection with the *property* have changed since the prior *environmental site assessment*.

8.4 *Uses and Conditions*—The *environmental professional(s)* conducting the *site reconnaissance* should note the uses and conditions specified in 8.4.1 through 8.4.4.8 to the extent *visually or physically observed* during the *site visit*. The uses and conditions specified in 8.4.1 through 8.4.4.8 should also be the subject of questions asked as part of *interviews* of *owners* and *occupants* (see Section 9). Uses and conditions to be noted shall be recorded in field notes of the *environmental professional(s)* conducting the *site reconnaissance* but are only required to be described in the report to the extent specified in 8.4.1 through 8.4.4.8. The *environmental professional(s)* performing the *Phase I Environmental Site Assessment* are obligated to identify uses and conditions only to the extent that they may be *visually and physically observed* on a *site visit*, as described in this practice, or to the extent that they are identified by the *interviews* (see Sections 9 and 10) or *record review* (see Section 7) processes described in this practice.

8.4.1 *General Site Setting:*

8.4.1.1 *Current Use(s) of the Property*—The current use(s) of the *property* shall be identified in the report. Any current uses likely to involve the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products* shall be identified in the report. Unoccupied occupant spaces should be noted. In identifying current uses of the *property*, more specific information is more helpful than less specific information. (For example, it is more useful to identify uses such as a hardware store, a grocery store, or a bakery rather than simply retail use.)

8.4.1.2 *Past Use(s) of the Property*—To the extent that indications of past uses of the *property* are *visually or physically observed* on the *site visit*, or are identified in the *interviews* or *record review*, they shall be identified in the report, and past uses so identified shall be described in the report if they are likely to have involved the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products*. (For example, there may be signs indicating a past use or a structure indicating a past use.)

8.4.1.3 *Current Uses of Adjoining Properties*—To the extent that current uses of *adjoining properties* are *visually or physically observed* on the *site visit*, or are identified in the *interviews* or *records review*, they shall be identified in the report, and current uses so identified shall be described in the report if they are likely to indicate *recognized environmental conditions* in connection with the *adjoining properties* or the *property*.

8.4.1.4 *Past Uses of Adjoining Properties*—To the extent that indications of past uses of *adjoining properties* are *visually or physically observed* on the *site visit*, or are identified in the *interviews* or *record review*, they shall be noted by the *environmental professional*, and past uses so identified shall be described in the report if they are likely to indicate *recognized environmental conditions* in connection with the *adjoining properties* or the *property*.

8.4.1.5 *Current or Past Uses in the Surrounding Area*—To the extent that the general type of current or past uses (e.g., residential, commercial, industrial) of properties surrounding the *property* are *visually or physically observed* on the *site visit* or going to or from the *property* for the *site visit*, or are identified in the *interviews* or *record review*, they shall be noted by the *environmental professional*, and uses so identified shall be described in the report if they are likely to indicate *recognized environmental conditions* in connection with the *property*.

8.4.1.6 *Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions*—The topographic conditions of the *property* shall be noted to the extent *visually or physically observed* or determined from *interviews*, as well as the general topography of the area surrounding the *property* that is *visually or physically observed* from the periphery of the *property*. If any information obtained shows there are likely to be *hazardous substances* or *petroleum products* on the property or on nearby properties and those *hazardous substances* or *petroleum products* are of a type that may migrate, topographic observations shall be analyzed in connection with geologic, hydrogeologic, hydrologic, and topographic information obtained pursuant to *records review* (see 7.2.3) and *interviews* to evaluate whether *hazardous substances* or *petroleum products* are likely to migrate to the *property*, or within or from the *property*, into groundwater or soil.

8.4.1.7 *General Description of Structures*—The report shall generally describe the structures or other improvements on the *property*, for example: number of buildings, number of stories each, approximate age of buildings, ancillary structures (if any), etc.

8.4.1.8 *Roads*—Public thoroughfares adjoining the *property* shall be identified in the report and any roads, streets, and parking facilities on the *property* shall be described in the report.

8.4.1.9 *Potable Water Supply*—The source of potable water for the *property* shall be identified in the report.

8.4.1.10 *Sewage Disposal System*—The sewage disposal system for the *property* shall be identified in the report. Inquiry shall be made as to the age of the system as part of the process under Sections 7, 9, or 10.

8.4.2 *Interior and Exterior Observations:*

8.4.2.1 *Current Use(s) of the Property*—The current use(s) of the *property* shall be identified in the report. Any current uses likely to involve the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products* shall be identified in the report. Unoccupied *occupant* spaces should be noted. In identifying current uses of the *property*, more specific information is more helpful than less specific information. (For example, it is more useful to identify uses such as a hardware store, a grocery store, or a bakery rather than simply retail use.)

8.4.2.2 *Past Use(s) of the Property*—To the extent that indications of past uses of the *property* are *visually or physically observed* on the *site visit*, or are identified in the *interviews* or *records review*, they shall be identified in the report, and past uses so identified shall be described in the report if they are likely to have involved the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products*. (For example, there may be signs indicating a past use or a structure indicating a past use.)

8.4.2.3 *Hazardous Substances and Petroleum Products in Connection with Identified Uses*—To the extent that present uses are identified that use, treat, store, dispose of, or generate *hazardous substances* and *petroleum products* on the *property*: (1) the *hazardous substances* and *petroleum products* shall be identified or indicated as unidentified in the report, and (2) the approximate quantities involved, types of containers (if any) and storage conditions shall be described in the report. To the extent that past uses are identified that used, treated, stored, disposed of, or generated *hazardous substances* and *petroleum products* on the *property*, the information shall be identified to the extent it is *visually or physically observed* during the *site visit* or identified from the *interviews* or the *records review*.

8.4.2.4 *Storage Tanks*—Above ground storage tanks, or underground storage tanks or vent pipes, fill pipes or access ways indicating underground storage tanks shall be identified (e.g., content, capacity, and age) to the extent *visually or physically observed* during the *site visit* or identified from the *interviews* or *records review*.

8.4.2.5 *Odors*—Strong, pungent, or noxious odors shall be described in the report and their sources shall be identified in the report to the extent *visually or physically observed* or identified from the *interviews* or *records review*.

8.4.2.6 *Pools of Liquid*—Standing surface water shall be noted. Pools or *sumps* containing liquids likely to be *hazardous substances* or *petroleum products* shall be described in the report to the extent *visually or physically observed* or identified from the *interviews* or *records review*.

8.4.2.7 *Drums*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, *drums* shall be described in the report, whether or not they are leaking, unless it is known that their contents are not *hazardous substances* or *petroleum products* (in that case the contents should be described in the report). *Drums* often hold 55 gal (208 L) of liquid, but containers as small as 5 gal (19 L) should also be described.

8.4.2.8 *Hazardous Substance and Petroleum Products Containers (Not Necessarily in Connection With Identified Uses)*—When containers identified as containing *hazardous substances* or *petroleum products* are *visually or physically observed* on the *property* and are or might be a *recognized environmental condition*: the *hazardous substances* or *petroleum products* shall be identified or indicated as unidentified in the report, and the approximate quantities involved, types of containers, and storage conditions shall be described in the report.

8.4.2.9 *Unidentified Substance Containers*—When open or damaged containers containing unidentified substances suspected of being *hazardous substances* or *petroleum products* are *visually or physically observed* on the *property*, the approximate quantities involved, types of containers, and storage conditions shall be described in the report.

8.4.2.10 *PCBs*—Electrical or hydraulic equipment known to contain PCBs or likely to contain PCBs shall be described in the report to the extent *visually or physically observed* or identified from the *interviews* or *records review*. Fluorescent light ballast likely to contain PCBs does not need to be noted.

8.4.3 *Interior Observations:*

8.4.3.1 *Heating/Cooling*—The means of heating and cooling the buildings on the property, including the fuel source for heating and cooling, shall be identified in the report (for example, heating oil, gas, electric, radiators from steam boiler fueled by gas).

8.4.3.2 *Stains or Corrosion*—To the extent *visually or physically observed* or identified from the *interviews*, stains or corrosion on floors, walls, or ceilings shall be described in the report, except for staining from water.

8.4.3.3 *Drains and Sumps*—To the extent *visually or physically observed* or identified from the *interviews*, floor drains and *sumps* shall be described in the report.

8.4.4 *Exterior Observations:*

8.4.4.1 *Pits, Ponds, or Lagoons*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, *pits, ponds, or lagoons* on the *property* shall be described in the report, particularly if they have been used in connection with waste disposal or waste treatment. *Pits, ponds, or lagoons* on *properties* adjoining the *property* shall be described in the report to the extent they are *visually or physically observed* from the *property* or identified in the *interviews* or *records review*.

8.4.4.2 *Stained Soil or Pavement*—To the extent *visually or physically observed* or identified from the *interviews*, areas of stained soil or pavement shall be described in the report.

8.4.4.3 *Stressed Vegetation*—To the extent *visually or physically observed* or identified from the *interviews*, areas of stressed vegetation (from something other than insufficient

water) shall be described in the report.

8.4.4.4 *Solid Waste*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, areas that are apparently filled or graded by non-natural causes (or filled by fill of unknown origin) suggesting trash or other solid waste disposal, or mounds or depressions suggesting trash or other solid waste disposal, shall be described in the report.

8.4.4.5 *Waste Water*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, waste water or other liquid (including storm water) or any discharge into a drain, ditch, or stream on or adjacent to the *property* shall be described in the report.

8.4.4.6 *Wells*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, all wells (including dry wells, irrigation wells, injection wells, abandoned wells, or other wells) shall be described in the report.

8.4.4.7 *Septic Systems*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, indications of on-site septic systems or cesspools should be described in the report.

9. Interviews With Owners and Occupants

9.1 *Objective*—The objective of *interviews* is to obtain information indicating *recognized environmental conditions* in connection with the *property*.

9.2 *Content*—Interviews with *owners* and *occupants* consist of questions to be asked in the manner and of persons as described in this section. The content of questions to be asked shall attempt to obtain information about uses and conditions as described in Section 8, as well as information described in 9.8 and 9.9.

9.3 *Medium*—Questions to be asked pursuant to this section may be asked in person, by telephone, or in writing, in the discretion of the *environmental professional*.

9.4 *Timing*—Except as specified in 9.8 and 9.9, it is in the discretion of the *environmental professional* whether to ask questions before, during, or after the *site visit* described in Section 8, or in some combination thereof.

9.5 *Who Should be Interviewed:*

9.5.1 *Key Site Manager*—Prior to the *site visit*, the *owner* should be asked to identify a person with good knowledge of the uses and physical characteristics of the *property* (the *key site manager*). Often the *key site manager* will be the property manager, the chief physical plant supervisor, or head maintenance person. (If the *user* is the current *property* owner, the user has an obligation to identify a *key site manager*, even if it is the *user* himself or herself.) If a *key site manager* is identified, the person conducting the *site visit* shall make at least one reasonable attempt (in writing or by telephone) to arrange a mutually convenient appointment for the *site visit* when the *key site manager* agrees to be there. If the attempt is successful, the *key site manager* shall be interviewed in conjunction with the *site visit*. If such an attempt is unsuccessful, when conducting the *site visit*, the *environmental professional* shall inquire whether an identified *key site manager* (if any) or if a person with good knowledge of the uses and physical characteristics of the *property* is available to be interviewed at that time; if so, that person shall be interviewed. In any case, it is within the discretion of the *environmental professional* to decide which questions to ask before, during, or after the *site visit* or in some combination thereof.

9.5.2 *Occupants*—A reasonable attempt shall be made to interview a reasonable number of *occupants* of the *property*.

9.5.2.1 *Multi-Family Properties*—For multi-family residential properties, residential *occupants* do not need to be interviewed, but if the *property* has nonresidential uses, interviews should be held with the nonresidential *occupants* based on criteria specified in 9.5.2.2.

9.5.2.2 *Major Occupants*—Except as specified in 9.5.2.1, if the *property* has five or fewer current *occupants*, a reasonable attempt shall be made to interview a representative of each one of them. If there are more than five current *occupants*, a reasonable attempt shall be made to interview the *major occupant(s)* and those other *occupants* whose operations are likely to indicate *recognized environmental conditions* in connection with the *property*.

9.5.2.3 *Reasonable Attempts to Interview*—Examples of reasonable attempts to interview those *occupants* specified in 9.5.2.2 include (but are not limited to) an attempt to interview such *occupants* when making the *site visit* or calling such *occupants* by telephone. In any case, when there are several *occupants* to interview, it is not expected that the *site visit* must be scheduled at a time when they will all be available to be interviewed.

9.5.2.4 *Occupant Identification*—The report shall identify the occupants interviewed and the duration of their occupancy.

9.5.3 *Prior Assessment Usage*—Persons interviewed as part of a prior *Phase I Environmental Site Assessment* consistent with this practice do not need to be questioned again about the content of answers they provided at that time. However, they should be questioned about any new information learned since that time, or others should be questioned about conditions since the prior *Phase I Environmental Site Assessment* consistent with this practice.

9.6 *Quality of Answers*—The person(s) interviewed should be asked to be as specific as reasonably feasible in answering questions. The person(s) interviewed should be asked to answer in good faith and to the extent of their knowledge.

9.7 *Incomplete Answers*—While the person conducting the interview(s) has an obligation to ask questions, in many instances the persons to whom the questions are addressed will have no obligation to answer them.

9.7.1 *User*—If the person to be interviewed is the user (the person on whose behalf the *Phase I Environmental Site Assessment* is being conducted), the *user* has an obligation to answer all questions posed by the person conducting the interview, in good faith, to the extent of his or her *actual knowledge* or to designate a *key site manager* to do so. If answers to questions are unknown or partially unknown to the *user* or such *key site manager*, this *interview* section of the *Phase I Environmental Site Assessment* shall not thereby be deemed incomplete.

9.7.2 *Non-user*—If the person conducting the interview(s) asks questions of a person other than a user but does not receive answers or receives partial answers, this section of the *Phase I Environmental Site Assessment* shall not thereby be deemed incomplete, provided that (1) the questions have

been asked (or attempted to be asked) in person or by telephone and written records have been kept of the person to whom the questions were addressed and the responses, or (2) the questions have been asked in writing sent by first class mail or by private, commercial carrier and no answer or incomplete answers have been obtained and at least one reasonable follow up (telephone call or written request) was made again asking for responses.

9.8 *Questions About Helpful Documents*—Prior to the *site visit*, the *property owner*, *key site manager* (if any is identified), and *user* (if different from the *property owner*) shall be asked if they know whether any of the documents listed in 9.8.1 exists and, if so, whether copies can and will be provided to the *environmental professional* within reasonable time and cost constraints. Even partial information provided may be useful. If so, the *environmental professional* conducting the *site visit* shall review the available documents prior to or at the beginning of the *site visit*.

9.8.1 *Helpful Documents:*

9.8.1.1 Environment site assessment reports,

9.8.1.2 Environment audit reports,

9.8.1.3 Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits),

9.8.1.4 Registrations for underground and above-ground storage tanks,

9.8.1.5 Material safety data sheets,

9.8.1.6 Community right-to-know plan,

9.8.1.7 Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc.,

9.8.1.8 Reports regarding hydrogeologic conditions on the property or surrounding area,

9.8.1.9 Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property,

9.8.1.10 Hazardous waste generator notices or reports, and

9.8.1.11 Geotechnical studies.

9.9 *Proceedings Involving the Property*—Prior to the *site visit*, the *property owner*, *key site manager* (if any is identified), and *user* (if different from the *property owner*) shall be asked whether they know of: (1) any pending, threatened, or past litigation relevant to *hazardous substances* or *petroleum products* in, on, or from the *property*; (2) any pending, threatened, or past administrative proceedings relevant to *hazardous substances* or *petroleum products* in, on or from the *property*; and (3) any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to *hazardous substances* or *petroleum products*.

10. Interviews With Local Government Officials

10.1 *Objective*—The objective of *interviews* with *local government officials* is to obtain information indicating *recognized environmental conditions* in connection with the *property*.

10.2 *Content*—Interviews with *local government officials* consist of questions to be asked in the manner and of persons as described in this section. The content of questions to be asked shall be decided in the discretion of the *environmental professional(s)* conducting the *Phase I Environmental Site Assessment*, provided that the questions shall generally be directed towards identifying *recognized environmental conditions* in connection with the *property*.

10.3 *Medium*—Questions to be asked may be asked in person or by telephone, in the discretion of the *environmental professional*.

10.4 *Timing*—It is in the discretion of the *environmental professional* whether to ask questions before or after the *site visit* described in Section 8, or in some combination thereof.

10.5 *Who Should Be Interviewed:*

10.5.1 *Local Agency Officials*—A reasonable attempt shall be made to interview at least one staff member of any one of the following types of local government agencies:

10.5.1.1 Local fire department that serves the *property*,

10.5.1.2 Local health agency or local/regional office of state health agency serving the area in which the *property* is located, or

10.5.1.3 Local agency or local/regional office of state agency having jurisdiction over hazardous waste disposal or other environmental matters in the area in which the *property* is located.

10.6 *Prior Assessment Usage*—Persons interviewed as part of a prior *Phase I Environmental Site Assessment* consistent with this practice do not need to be questioned again about the content of answers they provided at that time. However, they should be questioned about any new information learned since that time, or others should be questioned about conditions since the prior *Phase I Environmental Site Assessment* consistent with this practice.

10.7 *Quality of Answers*—The person(s) interviewed should be asked to be as specific as reasonably feasible in answering questions. The person(s) interviewed should be asked to answer in good faith and to the extent of their knowledge.

10.8 *Incomplete Answers*—While the person conducting the *interview(s)* has an obligation to ask questions, in many instances the persons to whom the questions are addressed will have no obligation to answer them. If the person conducting the *interview(s)* asks questions but does not receive answers or receives partial answers, this section shall not thereby be deemed incomplete, provided that questions have been asked (or attempted to be asked) in person or by telephone and written records have been kept of the person to whom the questions were addressed and their responses.

11. Evaluation and Report Preparation

11.1 *Report Format*—The report of findings for the *Phase I Environmental Site Assessment* should generally follow the recommended report format attached as Appendix X2 unless otherwise required by the user.

11.2 *Documentation*—The report should include documentation (for example, references, key exhibits) to support the analysis, opinions, and conclusions found in the report. All sources, including those that revealed no findings, should be sufficiently documented to facilitate reconstruction of the research at a later date.

11.3 *Contents of Report*—The report shall include those matters required to be included in the report pursuant to various provisions of this practice. In addition, the report shall state whether the *user* reported to the *environmental*

professional any information pursuant to the user's responsibilities described in Section 5 of this practice (for example, an *environmental lien* encumbering the *property* or any relevant specialized knowledge or experience of the user).

11.4 *Credentials*—The report shall name the *environmental professional(s)* involved in conducting the *Phase I Environmental Site Assessment*. One of two options shall be available to address qualifications of those persons involved in conducting the *Phase I Environmental Site Assessment*: (1) the report shall include a qualifications statement of the *environmental professional(s)* responsible for the *Phase I Environmental Site Assessment* and preparation of the report, and the qualifications statement shall include relevant individual and corporate qualifications; or (2) a written qualifications statement of the *environmental professional(s)* responsible for the *Phase I Environmental Site Assessment* and preparation of the report, including relevant individual and corporate qualifications, shall be delivered to the *user*.

11.5 *Opinion*—All evidence of recognized environmental conditions shall be described in full. The report shall include the *environmental professional's* opinion of the impact of *recognized environmental conditions* in connection with the *property*.

11.6 *Findings and Conclusions*—The report shall have a findings and conclusions section that states one of the following:

11.6.1 "We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E 1527 of [insert address or legal description], the *property*. Any exceptions to, or deletions from, this practice are described in Section [ ] of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property," or

11.6.2 "We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E 1527 of [insert address or legal description], the property. Any exceptions to, or deletions from, this practice are described in Section [ ] of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the *property* except for the following: (list)."

11.7 *Deviations*—All deletions and deviations from this practice (if any) shall be listed individually and in detail and all additions should be listed.

11.8 *Signature*—The environmental professional(s) responsible for the *Phase I Environmental Site Assessment* shall sign the report.

11.9 *Additional Services*—Any additional services contracted for between the user and the environmental professional(s), including a broader scope of assessment, more detailed conclusions, liability/risk evaluations, recommendation for Phase II testing, remediation techniques, etc., are beyond the scope of this practice, and should only be included in the report if so specified in the terms of engagement between the user and the *environmental professional*.

12. Non-Scope Considerations

12.1 *General:*

12.1.1 *Additional Issues*—There may be environmental issues or conditions at a property that parties may wish to assess in connection with *commercial real estate* that are outside the scope of this practice (the non-scope considerations). As noted by the legal analysis in Appendix X1 of this practice, some substances may be present on a property in quantities and under conditions that may lead to contamination of the property or of nearby properties but are not included in CERCLA's definition of hazardous substances (42 USC § 9601(14)) or do not otherwise present potential CERCLA liability. In any case, they are beyond the scope of this practice.

12.1.2 *Outside Standard Practices*—Whether or not a *user* elects to inquire into non-scope considerations in connection with this practice or any other environmental site assessment, no assessment of such non-scope considerations is required for appropriate inquiry as defined by this practice.

12.1.3 *Other Standards*—There may be standards or protocols for assessment of potential hazards and conditions associated with non-scope conditions developed by governmental entities, professional organizations, or other private entities.

12.1.4 *List of Additional Issues*—Following are several non-scope considerations that persons may want to assess in connection with commercial real estate. No implication is intended as to the relative importance of inquiry into such non-scope considerations, and this list of non-scope considerations is not intended to be all-inclusive:

12.1.4.1 Asbestos-Containing Materials,

12.1.4.2 Radon,

12.1.4.3 Lead-Based Paint,

12.1.4.4 Lead in Drinking Water, and

12.1.4.5 Wetlands.

APPENDIXES

(Nonmandatory Information)

X1. LEGAL BACKGROUND TO FEDERAL LAW AND THE PRACTICES ON ENVIRONMENTAL ASSESSMENTS IN COMMERCIAL REAL ESTATE TRANSACTIONS

INTRODUCTION

The legal section of Subcommittee E50.02 on Environmental Assessments In Commercial Real Estate Transactions provides the following background to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended including amended by the Superfund Amendments and Reauthorization Act (SARA), 42 USC § 9601 *et seq.* The background to CERCLA, commonly known as the Superfund law, outlines the potential liability for the cleanup of hazardous substances, available defenses to such liability, appropriate inquiry under Superfund, statutory definition of hazardous substances, petroleum products and petroleum exclusion to CERCLA, and reasons why certain environmental-hazards are excluded from the scope of Superfund and this practice and Practice E 1528.

There are several elements of Superfund liability and the commonly termed "innocent purchaser" defense, that arises out of the statutory third-party defense, that may impact on the development and understanding of this practice and Practice E 1528.

X1.1 *Superfund Liability:*

X1.1.1 All of the following elements of liability under Superfund must be established by a plaintiff before a defendant will be held liable under superfund for a *government's* response costs:[7]

X1.1.1.1 The site is a facility, as defined at § 9601(9),

X1.1.1.2 A release or threatened release of a hazardous substance from the site occurred (release is defined at § 9601(22) as *any* amount of any hazardous substance; "hazardous substance" is defined at § 9601(14) (see statutory definition of "hazardous substance"),

X1.1.1.3 A release or threatened release caused the plaintiff to incur response costs. Response costs are defined at § 9601(25) to mean costs related to both removal actions (§ 9601(23)) and remedial actions (§ 9601(24)), and

X1.1.1.4 Defendants fall within at least one of the four classes of responsible parties.[8]

X1.1.2 In order to recover response costs, a government plaintiff must prove that the costs were not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan (commonly referred to as the National Contingency Plan or NCP), 40 CFR § 300.[9] A private plaintiff must prove its costs were necessary costs of response and that the response action was consistent with the NCP. 42 USC § 9607 (a).[10]

X1.1.3 If there is a release or threatened release of hazardous substances on a site, private parties, even if they are not PRPs, may decide to incur response costs and seek recovery from other private parties, and PRPs may seek contribution from other PRPs.

X1.1.4 There is an important difference between government's burden to show that its response costs are "not inconsistent with the NCP" and the burden a private party bears to show that its response costs are "consistent with the NCP". See § 9607 (a)(4)(A) and (B). Courts have interpreted this statutory difference to give the government a rebuttable presumption that its response costs are consistent with the NCP, whereas a private party who undertakes response costs and seeks recovery from responsible parties bears the burden of proving its response was consistent with the NCP.[11] The EPA takes the position that a private party who undertakes a response action must be only in "substantial compliance", rather than strict technical compliance, with the NCP, as long as a CERCLA-quality cleanup is achieved. The NCP requirements for a private party response-action are set forth at 40 CFR § 300.700.

X1.2 *Defenses to Liability:*

---

[7] 42 USC §9607(a). (All statutory references are to Title 42 of the United States Code, unless otherwise specified.) See *United States versus Aceto Agricultural Chemicals Corp.*, 872 F.2d 1373 (8th Cir. 1989). Private plaintiffs, as well as the government, may seek response costs under Superfund from defendants. While many users of these ASTM practices or other private parties may think in terms of how to defend against Superfund liability, they should recognize that they may decide to conduct cleanup actions and seek response costs from other parties.

[8] The four classes of potentially responsible parties (PRPs) are listed as § 9607(a) as follows:

(*1*) Owner and operator of a facility (See § 9601 (20)(A): the term "owner or operator" does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect his security interest in the facility. In *re: Bergsoe Metal Corporation*, 910 F.2d 668 (9th Cir. Aug. 9, 1990); *Guidice versus BFG Electroplating and Manufacturing Co.*, 732 F.Supp. 556 (W.D.Pa. 1989); *United States v. Mirabile*, 23 ERC 1511 (E.D.Pa. 1985). But see *United States versus Fleet Factors Corp.*, 901 F.2d 1550 (11th Cir. 1990); *United States versus Maryland Bank and Trust Co.*, 632 F. Supp. 573 (D. Md. 1986). For clarification of the security interest exclusion, see EPA's rule on lender liability under CERCLA, 57 Federal Register 18344 (April 29, 1992),

(*2*) Any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of,

(*3*) Any person who by contract, agreement, or otherwise arranged for disposal or treatment or transport of hazardous substances, and

(*4*) Any person who accepts hazardous substances for transport to a facility selected by such person.

[9] The National Contingency Plan is the federal government's blueprint on how hazardous substances are to be cleaned up pursuant to CERCLA.

[10] See *Dedham Water Co. versus Cumberland Farms Dairy, Inc.*, 889 F.2d 1146 (1st Cir. 1989); other cases cited at ABA, *Natural Resources, Energy, and Environmental Law: 1989 The Year In Review*, p. 215, Note 155.

[11] *Amland Properties Corp. versus Aluminum Co. of America*, 711 F. Supp. 784, 794 (D. N.J. 1989); *Artesian Water Co. versus New Castle County*, 659 F. Supp. 1269, 1291 (D. Del. 1987); *United States versus Northeastern Pharmaceutical and Chemical Co.*, 579 F. Supp. 823 (W.D. Mo. 1984), *aff'd in part, rev'd on other grounds*, 810 F.2d 726 (8th Cir. 1986).

X1.2.1 Assuming all the elements of liability exist, a party may avoid liability only by meeting one of the defenses listed in § 9607(b). These listed defenses are exclusive of all others.[12] Section 9607(b) states (*emphasis added*):

"There shall be no liability under subsection (a) for a person otherwise liable who can establish by a preponderance of the evidence [the lowest evidentiary standard available, meaning more probable than not] that the release or threat of release of a hazardous substance and the damages resulting therefrom were *caused solely by*—
1) an act of God;
2) an act of war;
3) *an act or omission of a third party other* than an employee or agent of the defendant, or *than one whose act or omission occurs in connection with a contractual relationship* [see the definition of "contractual relationship" in X1.2.2], existing directly or indirectly, with the defendant . . ., if the defendant establishes by a preponderance of the evidence that (a) he exercised due care with respect to the hazardous substance concerned . . ., and (b) he took precautions against foreseeable acts or omissions of any such third party and the consequences that could foreseeably result from such actions or omissions."

X1.2.2 Under § 9601(35)(A), a contractual relationship "includes, but is not limited to, land contracts, deeds, or other instruments transferring title or possession . . .". These contractual relationships with third parties eliminate the defense to liability unless the defendant is an innocent purchaser. Or as stated by the statute at § 9601(35)(A)(emphasis added), a contractual relationship with the third party defeats the defense.

"unless the real property on which the facility is located was acquired by the defendant after disposal or placement of the hazardous substance . . . and one or more of the following circumstances is also established by the defendant by a preponderance of the evidence:
(i) At the time the defendant acquired the facility the defendant *did not know and had no reason to know* that any hazardous substance which is the subject of the release or threatened release was disposed of on, in, or at the facility.
(ii) The defendant is the government . . .
(iii) The defendant acquired the facility by inheritance or bequest."

X1.2.3 Therefore, the so-called innocent purchaser defense arises out of the third-party defense of § 9607(b)(3). Restated, this defense to Superfund liability is available only if the defendant shows the following:

X1.2.3.1 The release or threat of release was caused solely by a third party,

X1.2.3.2 The third party is not an employee or agent of the defendant,

X1.2.3.3 The acts or omissions of the third party did not occur in connection with a direct or indirect contractual relationship to the defendant, or if there was a contractual relationship, the defendant acquired the property after disposal or placement of the hazardous substance, and at the time the defendant acquired the facility the defendant *did not know and had no reason to know* that any hazardous substance that is the subject of the release or threatened release was disposed of on, in, or at the facility, and

X1.2.3.4 The defendant exercised due care with respect to the hazardous substances and took precautions against foreseeable acts or omissions of the third party.

X1.2.4 The statute then states at § 9601(35)(B) (*emphasis added*):

"To establish that the defendant had no reason to know, as provided [above], *the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice* in an effort to minimize liability. . . . [T]he court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection."

X1.3 *Appropriate Inquiry in Commercial Real Estate Transactions:*

X1.3.1 One of the major questions that parties to commercial real estate transactions face when considering their potential Superfund liability is, "What level of inquiry into the previous ownership and uses of the property is appropriate to establish the innocent purchaser defense to Superfund liability?" These practices are structured to articulate the level of inquiry under Superfund that is appropriate for different situations.

X1.3.2 *The Appropriate Level of Inquiry:*

X1.3.2.1 The level of environmental inquiry that is appropriate under Superfund cannot be the same for every property or every party to a real estate transaction. The level of inquiry, in fact, will change depending on the particular property or party involved in a transaction. The statutory language, Congressional history, and common sense support this conclusion.

X1.3.2.2 First, it must be noted that little case law exists to serve as guidance about the minimum level of inquiry that will be deemed appropriate for the innocent purchaser defense. See, for example, *United States versus Serafini*, 706 F. Supp. 346 (M.D. Pa. 1988), and 1990 U.S. Dist. LEXIS 18466 (M.D. Pa. 1990) (By entertaining disputed facts as to the custom and practice of viewing land prior to purchase, the court implied that appropriate inquiry necessarily varies on a site-by-site basis); *United States versus Pacific Hide and Fur Depot, Inc.*, 716 F. Supp. 1341 (D. Idaho 1989) (No inquiry was required by those who received an ownership interest in property via corporate stock transfer and warranty deed under the facts of this case); *International Clinical Laboratories, Inc. versus Stevens*, 30 ERC 2066, 20 ELR 20,560 (E.D.N.Y. 1990). (Despite a long history of toxic wastewater disposal and presence of the site on the state's hazardous waste disposal site list, the purchaser established the innocent purchaser defense since there were no visible environmental problems at the site, the defendant had no knowledge of environmental problems at the site and the purchase price did not reflect a reduction on account of the problem.)

X1.3.2.3 While the statute does not specifically distin-

[12] *United States versus Aceto Agricultural Chemicals Corp.*, 872 F.2d 1373 (8th Cir. 1989). But see *United States versus Marisol, Inc.*, 725 F. Supp. 833 (M.D. Pa. 1989) (equitable defenses under CERCLA may be available after the development of a factual record).

guish certain types of properties and uses from others, or certain types of parties from others, it does list certain factors courts should consider in determining whether one's inquiry under the circumstances is appropriate. The statute, as explained in X1.2, requires a court to consider a party's specialized knowledge or experience. The statute further mandates a court to consider what is "*reasonably* ascertainable information about the property", what contamination is *obviously* present, and the *party's* "ability to detect such contamination". The very use of terms such as "appropriate" and "reasonably", and the use of "specialized knowledge and experience" and "ability" in conjunction with the specific person attempting to utilize the defense signifies that Congress did not intend the appropriateness of the inquiry be judged by a bright line standard. If it so intended, Congress would have stated, but did not, that the same inquiry should be made in every case.

X1.3.2.4 What is reasonable and obvious to one party may not be so to other parties, and ability, by necessity, varies among all parties. The statute, therefore, recognizes that different properties and parties must be treated differently. That is, different parties may conduct different levels of inquiry appropriate to their circumstances.

X1.3.2.5 The statutory standard of "appropriate inquiry" suggests the level of inquiry will depend on the circumstances and the underlying facts. Since the facts are almost always different, the level of inquiry must change with them. The legislative history on this particular issue demonstrates that Congress intended that the level of inquiry changes with the type of property and party:[13]

> The duty to inquire under this provision shall be judged as of the time of acquisition. Defendants shall be held to a higher standard as public awareness of the hazards associated with hazardous releases has grown, as reflected by this Act, the 1980 Act [CERCLA] and other Federal and State statutes.
>
> Moreover, good commercial or customary practice with respect to inquiry in an effort to minimize liability shall mean that a reasonable inquiry must have been made in all circumstances, in light of best business and land transfer principles.
>
> Those engaged in commercial transactions should, however, be held to a higher standard than those who are engaged in private residential transactions.

X1.3.2.6 Because few cases address the standard of inquiry in the innocent purchaser defense and the legislative history describing Congressional intent is sparse, common sense is a useful guide in interpreting statutory language. If CERCLA mandated that the level of inquiry be the same for every property or potential defendant, then a lay consumer (renter or buyer) of a home, a purchaser of a small environmentally benign business, and a multinational corporate buyer of an industrial complex would have to conduct the same environmental site assessment (ESA) of the different properties in question. Additionally, the statute makes no mention of a Phase I ESA or any other specific type of inquiry one is to conduct in order for the inquiry to be deemed appropriate. If all inquires had to be at the same level to be "appropriate", it would be illogical to stop at a Phase I ESA since some commercial or industrial properties routinely undergo, in the exercise of good commercial and customary practices, intrusive sampling (typically a Phase II ESA activity). Therefore, since routinely some properties undergo sampling, an inflexible standard would require sampling of all properties, no matter what its use. This could not have been the intended result of SARA.

X1.3.3 *The Minimum Inquiries to Satisfy All Appropriate Inquiry:*

X1.3.3.1 Recognizing that inquiry changes with the underlying circumstances, the next question concerns that level of inquiry, if any, that Superfund requires to utilize the innocent landowner defense.

X1.3.3.2 As noted above, in some real estate transactions a Phase II ESA is routinely conducted. A Phase I ESA is conducted in these transactions only as a necessary prerequisite to outline the scope of the Phase II ESA. A Phase II ESA typically involves taking soil, water, and air samples to determine their contaminant content or verify that no contaminants are present or likely present. Note, however, that this simplistic outline of the Phase II ESA is misleading since the party can always dig down one foot deeper, take one more sample, or conduct one more test. The problem of how much inquiry is conducted, or at what level a party should begin, involves proving a negative, i.e., that no contamination is present.[14] Since, according to the statute, inquiries should be judged by the circumstances existing at the time of acquisition, then there could be some properties and parties to real estate transactions where it may be appropriate to begin the inquiry with an intrusive Phase II ESA in order to invoke the innocent purchaser defense to liability.

X1.3.3.3 At the other extreme, the minimum level of inquiry that a party would be expected to conduct is found by looking at the least environmentally obtrusive class of property and party from a CERCLA perspective. This transaction likely involves the lay buyer of a home or the renter of an apartment. Assuming these parties meet the other prerequisites for the innocent purchaser defense, what level of environmental inquiry must they conduct to avoid Superfund liability? While there are no recorded court cases on this issue, the answer is probably none, unless a particular residential purchaser or renter has some specialized knowledge about or experience with the property in question that would lead a court to conclude that some questions should have been asked. Beyond these rare situations, it is highly unlikely that Congress intended to saddle housing consumers with the burden of investigating or cleaning up contaminated

[13] H.R. Rep. No. 962, 99th Cong., 2d Sess. 187 (1986), *reprinted at* 1986 U.S. Code Cong. and Admin. News 3276, 3280.

[14] The inability to prove a negative creates a dilemma for the potential defendant. If the party's inquiry discovers contamination, then under the statute the party will not be able to avail itself of the innocent purchaser defense. If the inquiry does not discover contamination, EPA or another private party can argue in a response action that the inquiry was not "appropriate" and, therefore, the defendant can have no defense. This dilemma is explicitly recognized by the Subcommittee E50.02 as beyond any reasonable interpretation of Congressional intent. The scope of the E50.02 Standard Practices resolves the party's dilemma in the only reasonable way by stating: "It should not be concluded or assumed that the inquiry was not appropriate inquiry merely because the inquiry did not identify existing recognized environmental conditions in connection with a property. Environmental site assessments must be evaluated based on the reasonableness of the judgments made at the time and under the circumstances in which they were made." See 4.5.4.

sites. In fact, EPA has issued a statement of enforcement policy to the effect that it will not generally pursue owners of single family residences pursuant to CERCLA.[15] Therefore, for some properties and parties to real estate transactions, it is appropriate to conduct no environmental inquiry in order to meet one's innocent purchaser defense to liability.

X1.3.3.4 The minimum level of appropriate inquiry under Superfund, therefore, ranges from no specialized inquiry to conducting an intrusive Phase II ESA. In order to satisfy these practices, to do no specialized inquiry, such as the Transaction Screen or Phase I ESA, is not enough for commercial real estate transactions. Under current commercial and customary practice and in light of best business and land transfer principles, however, no environmental site assessments are conducted in many real estate transactions, particularly those involving smaller properties, vacant land, or transactions of low monetary value. This practice and Practice E 1528 and the minimum level of inquiry under these practices, actually raises the average level of inquiry that should be performed where the parties want to come within the protection of the innocent landowner defense.

X1.3.3.5 The burden of proof is on the defendant to sustain by a preponderance of the evidence, the innocent purchaser defense. This is the least onerous burden of proof available to a party in litigation. The defendant must show only that the evidence offered to support the level of inquiry that was taken at the time of acquisition is of greater weight or more convincing than the evidence offered in opposition to it. In other words, the evidence on the inquiry issue taken as a whole shows that the fact sought to be proved is more probable than not. There may be technical or business judgments on whether the inquiry conducted or any other fact in a particular case is sufficient to meet the needs or concerns of a party to the real estate transaction. The bottom line, however, is that the judgment on whether the specific facts of a case, in light of statutory language, are sufficient to produce liability or a viable defense to liability is a legal one and such judgments constitute the practice of law.

X1.3.3.6 Practice E 1528 is designed as the minimum level of inquiry to satisfy the practice from which a party to a commercial real estate transaction should proceed, recognizing that some parties to some commercial real estate transactions may wish to proceed by beginning with a Phase I or a Phase II ESA.

X1.4 *Statutory Definition of Hazardous Substance:*

X1.4.1 The statute at 42 USC § 9601(14)(A – F) defines hazardous substance by referring to five other statutes as well as to Superfund's own § 9602. The following is a description of the relevant portions of the other statutes and § 9602 of Superfund:

42 USC § 9601(14)(A): "[A]ny substance designated pursuant to section 1321(b)(2)(A) of Title 33." Title 33 USC § 1321 lies within the Clean Water Act and refers to, among other things, hazardous substance liability. 33 USC § 1321(b)(2)(A) states that the EPA shall develop, "as may be appropriate, regulations designating as hazardous substances, other than oil as defined in this section, such elements and compounds which, when discharged in any quantity into" the navigable waters of the United States . . ., present an imminent and substantial danger to the public . . . health or welfare, including, but not limited to, fish, shellfish, wildlife, shorelines, and beaches."

42 USC § 9601(14)(B): "[A]ny element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title." Section 9602 gives EPA the authority to designate as a hazardous substance "such elements, compounds, mixtures, solutions, and substances which, when released into the environment may present substantial danger to the public health or welfare or the environment. . . ."

42 USC § 9601(14)(C): "[A]ny hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 USCA § 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 USCA § 6901 *et seq.*] has been suspended by Act of Congress)." The Solid Waste Disposal Act of 1980 amended the Resource Conservation and Recovery Act (RCRA). 42 USCA § 6921 of RCRA provides authority to the EPA to develop criteria for identifying characteristics of hazardous waste and for listing particular hazardous wastes within the meaning of 42 USCA § 6903(5) of RCRA. RCRA, § 6903(5), defines hazardous waste to mean

"a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—

(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

For the identification and listing of hazardous wastes under RCRA, see 40 CFR §§ 261.1 *et seq.*

42 USC § 9601(14)(D): "[A]ny toxic pollutant listed under Section 1317(a) of Title 33." Section 1317(a) of Title 33 refers to toxic and pretreatment effluent standards under the Clean Water Act. The EPA is charged in this section with publishing and revising from time to time a list of toxic pollutants, taking "into account toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms, and the nature and extent of the effect of the toxic pollutant on such organisms." Each toxic pollutant listed according to this section shall be subject to effluent limitations. For toxic pollutant effluent standards, see 40 CFR §§ 129.1 *et seq.*

42 USC § 9601(14)(E): "[A]ny hazardous air pollutant listed under Section 112 of the Clean Air Act [42 USCA § 7412]." Section 7412 of Title 42 deals with national emission standards for hazardous air pollutants. The EPA is charged here with publishing and revising from time to time "a list which includes each hazardous air pollutant for which [it] intends to establish an emission standard under this section." The term "hazardous air pollutant" means an air pollutant that in EPA's judgment "causes, or contributes to, air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness." For emission standards for hazardous pollutants, see 40 CFR § 61.01 *et seq.*

42 USC § 9601(14)(F): "[A]ny imminently hazardous chemical substance or mixture with respect to which the [EPA] has taken action pursuant to Section 2606 of Title 15." Section 2606 of Title 15 deals with imminent hazards under the Toxic Substances Control Act (TSCA). The EPA is authorized under 15 USC § 2606 to seize an imminently hazardous chemical substance or mixture or seek other relief, such as requiring notice to users of the chemical substance or public notice of the risk

[15] EPA, *Policy Towards Owners of Residential Property at Superfund Sites*, OSWER Directive No. 9834.6, July 3, 1991.

associated with the substance or mixture. The term " 'imminently hazardous chemical substance or mixture' means a chemical substance or mixture which presents an imminent and unreasonable risk of serious or widespread injury to health or the environment."

X1.4.2 After Subsections A–F, outlined above, the Superfund definition of "hazardous substance" in § 9601(14) then goes on to state:

"The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

X1.4.3 The EPA has collected a list of "those substances in the statutes referred to in Section 101(14) of the Act [42 USC § 9601(14)]" 40 CFR § 302.1 (1989) ("List of Hazardous Substances And Reportable Quantities," 40 CFR Part 302). This list changes with notices in the Federal Register. Also, any time a new hazardous waste is listed, the waste automatically becomes a hazardous substance.

X1.5 *Petroleum Products:*

X1.5.1 Under the petroleum exclusion of CERCLA (42 USC § 9601(14)), petroleum and crude oil have been explicitly excluded from the definition of hazardous substances under CERCLA. Nevertheless, petroleum products are included within the scope of both practices because they are of concern in many commercial real estate transactions and current custom and usage is to include an inquiry into the presence of petroleum products in an environmental site assessment. Inclusion of petroleum products within the scope of the practices is not based upon the applicability, if any, of CERCLA to petroleum products.

X1.5.2 One reason to include petroleum products within the scope of the practices is because to do so reflects custom and usage: when environmental assessments are conducted in connection with commercial real estate transactions, they customarily include an assessment of the presence or likely presence of petroleum products under conditions that may lead to contamination. For example, environmental assessments ordinarily seek to assess whether there may be underground or above-ground storage tanks that may be leaking, whether those tanks contain petroleum products or some other product.

X1.5.3 In addition, although CERCLA may exclude petroleum products, other laws require cleanup of releases or spills of petroleum products. For example, petroleum products sometimes (for example, when they cannot be reclaimed from soil) become hazardous wastes subject to RCRA Subtitle C (42 USC § 6921 *et seq.*), must be cleaned up if released from underground storage tanks pursuant to RCRA Subtitle I (42 USC § 6991 *et seq.*), must be cleaned up pursuant to the Oil Pollution Act of 1990 (33 USC § 1321 *et seq.*), and must be cleaned up if released into the navigable waters of the United States pursuant to the Clean Water Act (33 USC § 1251 *et seq.*).

X1.5.4 Moreover, case law and EPA interpretations of the petroleum exclusion require an analysis of the facts of each case to determine whether a particular petroleum product is included in CERCLA's petroleum exclusion. The exclusion has been broadly interpreted to exclude gasoline and leaded gasoline from CERCLA's definition of hazardous substances regardless of the fact that gasoline and leaded gasoline contain certain indigenous components and additives which have themselves been designated as hazardous pursuant to CERCLA. See *Wilshire Westwood Associates versus Atlantic Richfield Corporation*, 881 F.2d 801 (9th Cir. 1989). The interpretation was narrowed when a judicial distinction was made between petroleum fractions produced by distillation processes and waste products resulting from contaminated tank scale. See *United States versus Western Processing Co.*, 761 F.Supp. 713 (W.D. Wash. 1991). Another decision narrowly interpreted CERCLA's petroleum exclusion to be inapplicable to oil-related wastes containing hazardous substances because the primary purpose of the exclusion is to remove "spills or other releases strictly of oil" from the scope of CERCLA response and liability (not releases of hazardous substances mixed with oil). See *City of New York versus Exxon Corporation*, 744 F. Supp. 474 (S.D.N.Y. 1990). For additional discussion, see EPA Memorandum entitled, "The Petroleum Exclusion Under the Comprehensive Environmental Response Compensation and Liability Act," issued by EPA's General Counsel, Francis S. Blake, July 31, 1987.

X1.6 *Exclusion of Certain Hazards From Superfund:*

X1.6.1 The information that follows is provided to explain why these potential environmental hazards are not covered by Superfund's appropriate inquiry responsibilities:

X1.6.2 As a preliminary matter, it should be noted that an environmental site assessment that does not address substances excluded from CERCLA (whether those substances are excluded because they are petroleum products or by virtue of other characteristics) but that otherwise constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" should nevertheless entitle the user to the innocent purchaser defense, assuming that other requirements of the defense are met.

X1.6.3 *Radon:*

X1.6.3.1 A case discussing Superfund and radon is *Amoco Oil Company versus Borden, Inc.*, 889 F.2d 664 (5th Cir. 1989). This case dealt with a private cost recovery action by the buyer of a site against the seller for response costs relating to radiation from phosphogypsum wastes left on the site. Radon emanated from these radioactive wastes. The case points out that the "EPA has designated radionuclides as hazardous substances under § 9602(a) of CERCLA. . . . Additionally, the . . . EPA under § 112 of the Clean Air Act . . . list radionuclides as a hazardous air pollutant. Radon and its daughter products are considered radionuclides, which are defined as 'any nuclide that emits radiation.' " Therefore, radon is a CERCLA hazardous substance. Also, when discussing what constitutes a release of a hazardous substance under the statute, the statute is plain that there is no quantitative requirement and that a release, broadly defined at 42 USC § 9601(22), of *any* amount constitutes a CERCLA release.

X1.6.3.2 Liability under Superfund depends on several factors, as noted in X1.1. Only one of four factors is the release or threatened release of a hazardous substance. The other three factors are (*1*) the site is a facility, (*2*) the

defendant falls within at least one of four classes of potentially responsible parties (PRPs), and (*3*) the release or threatened release *caused* the plaintiff (that can be the government or another private party) to incur response costs. Further, response costs must not be inconsistent with the National Contingency Plan (NCP), *and must not be limited by § 9604(a)(3).* And, of course, there is no need to raise the innocent purchaser defense and its appropriate inquiry requirements unless the elements of liability will be met.

X1.6.3.3 Where radon from any source occurs in a building, three of the liability elements under CERCLA are met. There is a release of a hazardous substance, the building is a facility, and we can assume the defendant is a PRP. However, under 42 USC § 9604(a)(3)(A), "[r]emedial actions taken in response to hazardous substances as they occur naturally are specifically excluded from the NCP and are therefore not recoverable." *Amoco Oil Company versus Borden, Inc.*, 889 F.2d at 570. The statute is plain.[16]

"(3) Limitations on response

The President shall not provide for a removal or remedial action under this section in response to a release or threat of release—

(A) *of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found;*

(B) from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures;[17] or

(C) into public or private drinking water supplies due to deterioration of the system through ordinary use.[18]

(4) Exception to limitations

Notwithstanding paragraph (3) of this subsection, to the extent authorized by this section, the President may respond to any release or threat of release if in the President's discretion, it constitutes a public health or environmental emergency and no other person with the authority and capability to respond to the emergency will do so in a timely manner."

X1.6.3.4 Therefore, no liability under CERCLA attaches for naturally occurring radon. If a party to a real estate transaction wants to look for radon within a building, no amount of radon investigation will have any bearing on one's innocent purchaser defense under Superfund. Investigation of naturally occurring radon would be included, if at all, in the portion of the practice that deals with non-scope issues.

X1.6.4 *Asbestos:*

X1.6.4.1 The analysis of asbestos is similar to that involving radon. Before considering appropriate inquiry responsibilities, the four elements of CERCLA liability must be satisfied. Once again, as with radon, they are not met.

X1.6.4.2 Section 9604(a)(3)(B) of CERCLA prohibits response actions involving a release or threat of release "from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures." There are a number of cases dealing with asbestos that interpret this statutory language. One such case is *First United Methodist Church of Hyattsville versus United States Gypsum Co.* that cites to other relevant cases.

X1.6.4.3 In *First United* the church brought a private cost recovery action against the manufacturer of asbestos-containing acoustical plaster. In holding that the action was barred by a state statute of repose (a certain time allowed by statute for bringing litigation) and that CERCLA did not preempt the state statute of repose, the court stated that § 9604(a)(3)(B) of CERCLA "represents much more than a procedural limitation on the President's authority; it is a substantive limitation of the breadth of CERCLA itself."[19] Therefore, the limitations of § 9604(a)(3) apply to private parties as well.

X1.6.4.4 Citing to the legislative history, the *First United* court concluded, "[i]n view of this clear expression of Congressional intent, we wil[l] not expand CERCLA to encompass asbestos-removal actions." The court further explained:[20]

"In closing, we note that this interpretation of CERCLA fully comports with the most fundamental guide to statutory construction—common sense. To extend CERCLA's strict liability scheme to all past and present owners of buildings containing asbestos as well as to all persons who manufactured, transported, and installed asbestos products into buildings, would be to shift literally billions of dollars of removal cost liability based on nothing more than an improvident interpretation of a statute that Congress never intended to apply in this context. [FN12] ... Certainly, if Congress had intended for CERCLA to address the monumental asbestos problem, it would have said so more directly when it passed SARA. ...

FN12—It is for this reason, that Congress simply did not intend for CERCLA to remedy the asbestos-removal problem, that we decline to follow the reasoning of *Prudential, Knox and Covalt* in rejecting First United's preemption argument. Instead of recognizing the fact that CERCLA is out of context in this situation, these courts rejected similar attempts to invoke the statute by construing CERCLA's key terms in a way to exclude asbestos-removal actions. *Covalt*, 860 F.2d [1434] at 1438-39 (defining "environment" to exclude the interior of a workplace); *Knox*, 690 F. Supp at 756-57 (defining "release" in terms of "spills" or "disposal"); *Prudential*, [711 F. Supp 1244] at 1254-55 (defining "disposal" to exclude the sale of a product for consumer use). We find this analysis unsatisfactory because it runs the risk of unnecessarily restricting the scope of CERCLA merely to dispose of claims that the statute was never intended to encompass in the first place. It is far better to simply acknowledge the inapplicability of CERCLA to asbestos-removal claims than to restrict its operative terms."

[16] 42 USC § 9604(a)(3) and (4) (*emphasis added*).

[17] This provision has implications for asbestos and lead-based paint. See X1.6.4 and X1.6.5.

[18] This provision has implications for lead from lead pipes and solder. See X1.6.5.

[19] One such case is *First United Methodist Church of Hyattsville versus United States Gypsum Co.*, 882 F.2d 862 (4th Cir. 1989), that cites to other relevant cases.

[20] The same at 869; See also *3550 Stevens Creek Associates versus Barclays Bank of California*, 915 F.2d 1355 (9th Cir. 1990).

X1.6.4.5 Since asbestos that is a part of the structure of, and results in exposure within, residential buildings or business or community structures is excluded from CERCLA liability, it should not be investigated pursuant to a party's innocent purchaser appropriate inquiry requirements. Like naturally occurring radon, investigation of asbestos-containing materials that are part of the structure of buildings should be included, if at all, in the portion of this practice that deals with non-scope issues. Note, however, if asbestos is disposed of on a site and, therefore, is no longer part of the structure of a building, the cleanup of the disposed asbestos is subject to Superfund response actions. Likewise, if a building is sold with the knowledge that it will be demolished, one court ruled that the sale constitutes a disposal falling under CERCLA's liability provisions.[21]

X1.6.5 *Lead in Drinking Water and Lead-Based Paint*—These hazards can be evaluated in terms of the exclusions of 42 USC § 9604(a)(3)(B) and (C), in an analysis similar to the analysis applied above to radon and asbestos. While there is no reported case law on these environmental issues as they relate to Superfund, the statutory language seems clear that these environmental hazards are not encompassed by Superfund's appropriate inquiry responsibilities. Note, however, like asbestos, where there is a disposal of these substances on the site or in a facility, CERCLA liability may arise.

[21] *CP Holdings, Inc. versus Goldberg-Zoino & Associates, Inc.*, 769 F. Supp. 432 (D.N.H. 1991).

X2. RECOMMENDED TABLE OF CONTENTS AND REPORT FORMAT

X2.1 Summary
X2.2 Introduction
X2.2.1 Purpose
X2.2.2 Special Terms and Conditions
X2.2.3 Limitations and Exceptions of Assessment
X2.2.4 Limiting Conditions and Methodology Used
X2.3 Site Description
X2.3.1 Location and Legal Description
X2.3.2 Site and Vicinity Characteristics
X2.3.3 Descriptions of Structures, Roads, Other Improvements on the Site (including heating/cooling system, sewage disposal, source of potable water)
X2.3.4 Information (if any) Reported by User Regarding Environmental Liens or Specialized Knowledge or Experience (pursuant to Section 5.)
X2.3.5 Current Uses of the Property
X2.3.6 Past Uses of the Property (to the extent identified)
X2.3.7 Current and Past Uses of Adjoining Properties (to the extent identified)
X2.3.8 Site Rendering, Map, or Site Plan
X2.4 Records Review
X2.4.1 Standard Environmental Record Sources, Federal and State
X2.4.2 Physical Setting Source(s)
X2.4.3 Historical Use Information
X2.4.4 Additional Record Sources (if any)
X2.5 Information from Site Reconnaissance and Interviews
X2.5.1 Hazardous Substances in Connection with Identified Uses (including storage, handling, disposal)
X2.5.2 Hazardous Substance Containers and Unidentified Substance Containers (including storage, handling, disposal)
X2.5.3 Storage Tanks (including contents and assessment of leakage or potential for leakage)
X2.5.4 Indications of PCBs (including how contained and assessment of leakage or potential for leakage)
X2.5.5 Indications of Solid Waste Disposal
X2.5.6 Physical Setting Analysis, if migrating Hazardous Substances are an issue
X2.5.7 Any Other Conditions of Concern
X2.5.8 Site Plan (if available)
X2.6 Findings and Conclusions
X2.7 Signatures of Environmental Professionals
X2.8 Qualifications of Environmental Professionals Participating in Phase I Environmental Site Assessment
X2.9 Optional Appendices (for example):
X2.9.1 Other Maps, Figures, and Photographs
X2.9.2 Ownership/Historical Documentation
X2.9.3 Regulatory Documentation
X2.9.4 Interview Documentation
X2.9.5 Contract between User and Environmental Professional

The American Society for Testing and Materials takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, 1916 Race St., Philadelphia, PA 19103.

Notations show changes from ASTM E 1527-94
Notations are by Timothy Ramsey, 312-845-2507
4/13/05

Designation: E 1527 - 97

Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process[1]

This standard is issued under the fixed designation E 1527; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 *Purpose*—The purpose of this practice, as well as Practice E 1528, is to define good commercial and customary practice in the United States of America for conducting an *environmental site assessment*[2] of a parcel of *commercial real estate* with respect to the range of contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and *petroleum products*. As such, this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner defense* to CERCLA liability: that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC § 9601(35)(B). (See Appendix X1 for an outline of CERCLA's liability and defense provisions.)

1.1.1 *Recognized Environmental Conditions*—In defining a standard of good commercial and customary practice for conducting an *environmental site assessment* of a parcel of *property*, the goal of the processes established by this practice is to identify *recognized environmental conditions*. The term *recognized environmental conditions* means the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, groundwater, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

1.1.2 *Two Related Practices*—This practice is closely related to Practice E 1528. Both are *environmental site assessments* for *commercial real estate*. See 4.3.

1.1.3 *Petroleum Products*—*Petroleum products* are included within the scope of both practices because they are of concern with respect to many parcels of *commercial real estate* and current custom and usage is to include an inquiry into the presence of *petroleum products* when doing an *environmental site assessment* of *commercial real estate*. Inclusion of *petroleum products* within the scope of this practice and Practice E 1528 is not based upon the applicability, if any, of CERCLA to *petroleum products*. (See Appendix X1 for discussion of *petroleum exclusion* to CERCLA liability.)

1.1.4 *CERCLA Requirements Other Than Appropriate Inquiry*—This practice does not address whether requirements in addition to *appropriate inquiry* have been met in order to qualify for CERCLA's *innocent landowner defense* (for example, the duties specified in 42 USC § 9607(b)(3)(a) and (b) and cited in Appendix X1).

1.1.5 *Other Federal, State, and Local Environmental Laws*—This practice does not address requirements of any state or local laws or of any federal laws other than the appropriate inquiry provisions of CERCLA's *innocent landowner defense*. *Users* are cautioned that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. *Users* should also be aware that there are likely to be other legal obligations with regard to *hazardous substances* or *petroleum products* discovered on *property* that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance.

1.1.6 *Documentation*—The scope of this practice includes research and reporting requirements that support the user's ability to qualify for the *innocent landowner defense*. As such, sufficient documentation of all sources, records, and resources utilized in conducting the inquiry required by this practice must be provided in the written report (refer to 7.1.8 and 11.2).

New - not in ASTM E 1527-94

1.2 *Objectives*—Objectives guiding the development of this practice and Practice E 1528 are (1) to synthesize and put in writing good commercial and customary practice for *environmental site assessments* for *commercial real estate*, (2) to facilitate high quality, standardized *environmental site assessments*, (3) to ensure that the standard of *appropriate inquiry* is practical and reasonable, and (4) to clarify an industry standard for *appropriate inquiry* in an effort to guide legal interpretation of CERCLA's *innocent landowner defense*.

1.3 *Considerations Beyond Scope*—The use of this practice is strictly limited to the scope set forth in this section. Section 12 of this practice, identifies, for informational purposes, certain environmental conditions (not an all-inclusive list) that may exist on a *property* that are beyond the scope of this practice but may warrant consideration by parties to a *commercial real estate* transaction.

[1] This practice is under the jurisdiction of ASTM Committee E-50 on Environmental Assessment and is the direct responsibility of Subcommittee E50.02 on Commercial Real Estate Transactions.

Current edition approved March 10, 1997. Published May 1997. Originally published as E 1527 - 93. Last previous edition E 1527 - 94.

[2] All definitions, descriptions of terms, and acronyms are defined in Section 3. Whenever terms defined in 3.2 or described in 3.3 are used in this practice, they are in *italics*.

1.4 *Organization of This Practice*—This practice has sev-al parts and two appendixes. Section 1 is the Scope. Section is Referenced Documents. Section 3, Terminology, has efinitions of terms not unique to this practice and descrip-ons of terms unique to this practice and acronyms. Section is Significance and Use of this practice. Section 5 describes ser's Responsibilities. Sections 6 through 11 are the main ody of the Phase I Environmental Site Assessment, in-uding evaluation and report preparation. Section 12 pro-des additional information regarding non-scope consider-ions (see 1.3). The appendixes are included for information nd are not part of the procedures prescribed in either this actice or Practice E 1528. Appendix X1 explains the ability and defense provisions of CERCLA that will assist e user in understanding the user's responsibilities under ERCLA; it also contains other important information garding CERCLA and this practice. Appendix X2 provides recommended table of contents and report format for a hase I Environmental Site Assessment Report.

1.5 *This standard does not purport to address all of the fety concerns, if any, associated with its use. It is the sponsibility of the user of this standard to establish appro-riate safety and health practices and determine the applica-lity of regulatory limitations prior to use.*

Referenced Document

2.1 *ASTM Standard:*

E 1528 Practice for Environmental Site Assessments: Transaction Screen Process[3]

Terminology

3.1 This section provides definitions, descriptions of rms, and a list of acronyms for many of the words used in is practice and Practice E 1528. The terms are an integral rt of both practices and are critical to an understanding of e practices and their use.

3.2 *Definitions:*

3.2.1 *asbestos*—six naturally occurring fibrous minerals und in certain types of rock formations. Of the six, the inerals chrysotile, amosite, and crocidolite have been most ommonly used in building products. When mined and ocessed, asbestos is typically separated into very thin fibers. ecause asbestos is strong, incombustible, and corrosion-sistant, asbestos was used in many commercial products eginning early in this century and peaking in the period om World War II into the 1970s. When inhaled in fficient quantities, asbestos fibers can cause serious health oblems.[4,5]

3.2.2 *asbestos containing material (ACM)*—any material product that contains more than 1 % asbestos.[4]

3.2.3 *Comprehensive Environmental Response, Compen-ation, and Liability Information System (CERCLIS)*—the st of sites compiled by EPA that EPA has investigated or is rrently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities List.

3.2.4 *construction debris*—concrete, brick, asphalt, and other such building materials discarded in the construction of a building or other improvement to property.

3.2.5 *contaminated public wells*—public wells used for drinking water that have been designated by a government entity as contaminated by toxic substances (for example, chlorinated solvents), or as having water unsafe to drink without treatment.

3.2.6 *CORRACTS list*—environmental protection agencies (EPA's) list of treatment, storage, or disposal facilities subject to corrective action under RCRA.

3.2.7 *demolition debris*—concrete, brick, asphalt, and other such building materials discarded in the demolition of a building or other improvement to property.

3.2.8 *drum*—a container (typically, but not necessarily, holding 55 gal (208 L) of liquid) that may be used to store *hazardous substances* or *petroleum products*.

3.2.9 *dry wells*—underground areas where soil has been removed and replaced with pea gravel, coarse sand, or large rocks. Dry wells are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional) and wastewater disposal (often illegal).

3.2.10 *dwelling*—structure or portion thereof used for residential habitation.

3.2.11 *environmental lien*—a charge, security, or encumbrance upon title to a *property* to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a *property*, including (but not limited to) liens imposed pursuant to CERCLA 42 USC § 9607(1) and similar state or local laws.

3.2.12 *ERNS list*—EPA's emergency response notification system list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. Notification requirements for such releases or spills are codified in 40 CFR Parts 302 and 355.

3.2.13 *Federal Register, (FR)*—publication of the United States government published daily (except for federal holidays and weekends) containing all proposed and final regulations and some other activities of the federal government. When regulations become final, they are included in the Code of Federal Regulations (CFR), as well as published in the Federal Register.

3.2.14 *fire insurance maps*—maps produced for private fire insurance map companies that indicate uses of properties at specified dates and that encompass the property. These maps are often available at local libraries, historical societies, private resellers, or from the map companies who produced them. See Question 23 of the transaction screen process in Practice E 1528 and 7.3.4.2 of this practice.

3.2.15 *hazardous substance*—A substance defined as a hazardous substance pursuant to CERCLA 42 USC § 9601(14), as interpreted by EPA regulations and the courts: "(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section

"e.g." in ASTM E 1527-94

New-not in ASTM E 1527-94

[3] *Annual Book of ASTM Standards*, Vol 11.04.

[4] See EPA, *Managing Asbestos in Place, A Building Owner's Guide to operations and Maintenance Programs for Asbestos-Containing Materials*, July 90, p. 2.

[5] See also, for an additional definition of asbestos, ASTM STP 834, ASTM.

3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 USC § 7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)." (See Appendix X1.)

3.2.16 *hazardous waste*—any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress). The Solid Waste Disposal Act of 1980 amended RCRA. RCRA defines a hazardous waste, in 42 USC § 6903, as: "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

3.2.17 *landfill*—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *solid waste disposal site* and is also known as a garbage dump, trash dump, or similar term.

3.2.18 *local street directories*—directories published by private (or sometimes government) sources that show ownership, occupancy, and/or use of sites by reference to street addresses. Often local street directories are available at libraries of local governments, colleges or universities, or historical societies. See 7.3.4.6 of this practice.

3.2.19 *material safety data sheet (MSDS)*—written or printed material concerning a hazardous substance which is prepared by chemical manufacturers, importers, and employers for hazardous chemicals pursuant to OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

3.2.20 *National Contingency Plan (NCP)*—the National Oil and Hazardous Substances Pollution Contingency Plan, found at 40 CFR § 300, that is the EPA's blueprint on how hazardous substances are to be cleaned up pursuant to CERCLA.

3.2.21 *National Priorities List (NPL)*—list compiled by EPA pursuant to CERCLA 42 USC § 9605(a)(8)(B) of properties with the highest priority for cleanup pursuant to EPA's Hazard Ranking System. See 40 CFR Part 300.

3.2.22 *occupants*—those tenants, subtenants, or other persons or entities using the *property* or a portion of the *property*.

3.2.23 *owner*—generally the fee owner of record of the *property*.

3.2.24 *petroleum exclusion*—The exclusion from CERCLA liability provided in 42 USC § 9601(14), as interpreted by the courts and EPA: "The term (hazardous substance) does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

3.2.25 *petroleum products*—those substances included within the meaning of the *petroleum exclusion* to CERCLA, 42 USC § 9601(14), as interpreted by the courts and EPA, that is: petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of 42 USC § 9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). (The word fraction refers to certain distillates of crude oil, including gasoline, kerosene, diesel oil, jet fuels, and fuel oil, pursuant to *Standard Definitions of Petroleum Statistics*.[6]

3.2.26 *Phase I Environmental Site Assessment*—the process described in this practice.

3.2.27 *pits, ponds, or lagoons*—man-made or natural depressions in a ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products*. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

3.2.28 *property*—the real property that is the subject of the *environmental site assessment* described in this practice. Real property includes buildings and other fixtures and improvements located on the property and affixed to the land.

3.2.29 *property tax files*—the files kept for property tax purposes by the local jurisdiction where the property is located and includes records of past ownership, appraisals, maps, sketches, photos, or other information that is reasonably ascertainable and pertaining to the property. See 7.3.4.3.

3.2.30 *RCRA generators*—those persons or entities that generate hazardous wastes, as defined and regulated by RCRA.

3.2.31 *RCRA generators list*—list kept by EPA of those persons or entities that generate hazardous wastes as defined and regulated by RCRA.

3.2.32 *RCRA TSD facilities*—those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

3.2.33 *RCRA TSD facilities list*—list kept by EPA of those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

---

[6] *Standard Definitions of Petroleum Statistics*, American Petroleum Institute, Fourth Edition, 1988.

3.2.34 *recorded land title records*—records of fee ownership, leases, land contracts, easements, liens, and other encumbrances on or of the property recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located. (Often such records are kept by a municipal or county recorder or clerk.) Such records may be obtained from title companies or directly from the local government agency. Information about the title to the property that is recorded in a U.S. district court or any place other than where land title records are, by law or custom, recorded for the local jurisdiction in which the property is located, are not considered part of recorded land title records. See 7.3.4.4.

3.2.35 *records of emergency release notifications (SARA § 304)*—Section 304 of EPCRA or Title III of SARA requires operators of facilities to notify their local emergency planning committee (as defined in EPCRA) and state emergency response commission (as defined in EPCRA) of any release beyond the facility's boundary of any reportable quantity of any extremely hazardous substance. Often the local fire department is the local emergency planning committee. Records of such notifications are "Records of Emergency Release Notifications" (SARA § 304).

3.2.36 *report*—the written record of a transaction screen process as required by Practice E 1528 or the written report prepared by the environmental professional and constituting part of a "Phase I Environmental Site Assessment," as required by this practice.

3.2.37 *solid waste disposal site*—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *landfill* and is also known as a garbage dump, trash dump, or similar term.

3.2.38 *solvent*—a chemical compound that is capable of dissolving another substance and may itself be a *hazardous substance*, used in a number of manufacturing/industrial processes including but not limited to the manufacture of paints and coatings for industrial and household purposes, equipment clean-up, and surface degreasing in metal fabricating industries.

3.2.39 *state registered USTs*—state lists of underground storage tanks required to be registered under Subtitle I, Section 9002 of RCRA.

3.2.40 *sump*—a pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

3.2.41 *TSD facility*—treatment, storage, or disposal facility (see *RCRA TSD facilities*).

3.2.42 *underground storage tank (UST)*—any tank, including underground piping connected to the tank, that is or has been used to contain *hazardous substances* or *petroleum products* and the volume of which is 10 % or more beneath the surface of the ground.

3.2.43 *USGS 7.5 Minute Topographic Map*—the map (if any) available from or produced by the United States Geological Survey, entitled "USGS 7.5 Minute Topographic Map," and showing the property. See 7.3.4.5.

3.2.44 *wastewater*—water that (*1*) is or has been used in an industrial or manufacturing process, (*2*) conveys or has conveyed sewage, or (*3*) is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. Wastewater does not include water originating on or passing through or adjacent to a site, such as stormwater flows, that has not been used in industrial or manufacturing processes, has not been combined with sewage, or is not directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

3.2.45 *zoning/land use records*—those records of the local government in which the *property* is located indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. They are often located in the planning department of a municipality or county. See 7.3.4.8.

3.3 *Definitions of Terms Specific to This Standard:*

3.3.1 *actual knowledge*—the knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge that is knowledge imputed to an individual or entity.

3.3.2 *adjoining properties*—any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them.

3.3.3 *aerial photographs*—photographs taken from an airplane or helicopter (from a low enough altitude to allow identification of development and activities) of areas encompassing the property. Aerial photographs are often available from government agencies or private collections unique to a local area. See 7.3.4.1 of this practice.

3.3.4 *appropriate inquiry*—that inquiry constituting "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in CERCLA, 42 USC § 9601(35)(B), that will give a party to a *commercial real estate* transaction the *innocent landowner defense* to CERCLA liability (42 USC § 9601(A) and (B) and § 9607(b)(3)), assuming compliance with other elements of the defense. See Appendix X1.

3.3.5 *approximate minimum search distance*—the area for which records must be obtained and reviewed pursuant to Section 7 subject to the limitations provided in that section. This may include areas outside the *property* and shall be measured from the nearest *property* boundary. This term is used in lieu of radius to include irregularly shaped properties.

3.3.6 *building department records*—those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property. Often building department records are located in the building department of a municipality or county. See 7.3.4.7.

3.3.7 *commercial real estate*—any real property except a dwelling or property with no more than four dwelling units exclusively for residential use (except that a dwelling or property with no more than four dwelling units exclusively for residential use is included in this term when it has a commercial function, as in the building of such dwellings for profit). This term includes but is not limited to undeveloped real property and real property used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes; property used for residential purposes that has more than four residential dwelling units; and property

with no more than four dwelling units for residential use when it has a commercial function, as in the building of such dwellings for profit.

3.3.8 *commercial real estate transaction*—a transfer of title to or possession of real property or receipt of a security interest in real property, except that it does not include transfer of title to or possession of real property or the receipt of a security interest in real property with respect to an individual dwelling or building containing fewer than five dwelling units, nor does it include the purchase of a lot or lots to construct a dwelling for occupancy by a purchaser, but a commercial real estate transaction does include real property purchased or leased by persons or entities in the business of building or developing dwelling units.

3.3.9 *due diligence*—the process of inquiring into the environmental characteristics of a parcel of *commercial real estate* or other conditions, usually in connection with a commercial real estate transaction. The degree and kind of due diligence vary for different properties and differing purposes. See Appendix X1.

3.3.10 *environmental audit*—the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe Practice E 1528 or this practice, although an environmental audit may include an *environmental site assessment* or, if prior audits are available, may be part of an environmental site assessment. See Appendix X1.

3.3.11 *environmental professional*—a person possessing sufficient training and experience necessary to conduct a *site reconnaissance, interviews*, and other activities in accordance with this practice, and from the information generated by such activities, having the ability to develop opinions and conclusions regarding *recognized environmental conditions* in connection with the *property* in question. An individual's status as an environmental professional may be limited to the type of assessment to be performed or to specific segments of the assessment for which the professional is responsible. The person may be an independent contractor or an employee of the *user*.

New - not in ASTM E 1527 94

3.3.12 *environmental site assessment (ESA)*—the process by which a person or entity seeks to determine if a particular parcel of real *property* (including improvements) is subject to *recognized environmental conditions*. At the option of the user, an environmental site assessment may include more inquiry than that constituting *appropriate inquiry* or, if the user is not concerned about qualifying for the *innocent landowner defense*, less inquiry than that constituting *appropriate inquiry*. See Appendix X1. An environmental site assessment is both different from and less rigorous than an *environmental audit*.

3.3.13 *fill dirt*—dirt, soil, sand, or other earth, that is obtained off-site, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real property. It does not include material that is used in limited quantities for normal landscaping activities.

3.3.14 *hazardous waste/contaminated sites*—sites on which a release has occurred, or is suspected to have occurred, of any *hazardous substance, hazardous waste*, or *petroleum products*, and that release or suspected release has been reported to a government entity.

3.3.15 *innocent landowner defense*—that defense to CERCLA liability provided in 42 USC § 9601(35) and § 9607(b)(3). One of the requirements to qualify for this defense is that the party make "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice." There are additional requirements to qualify for this defense. See Appendix X1.

3.3.16 *interviews*—those portions of this practice that are contained in Section 9 and 10 thereof and address questions to be asked of *owners* and *occupants* of the *property* and questions to be asked of local government officials.

3.3.17 *key site manager*—the person identified by the *owner* of a *property* as having good knowledge of the uses and physical characteristics of the property. See 9.5.1.

3.3.18 *local government agencies*—those agencies of municipal or county government having jurisdiction over the *property*. Municipal and county government agencies include but are not limited to cities, parishes, townships, and similar entities.

3.3.19 *LUST sites*—state lists of leaking underground storage tank sites. Section 9003 (h) of Subtitle I of RCRA gives EPA and states, under cooperative agreements with EPA, authority to clean up releases from UST systems or require owners and operators to do so.

3.3.20 *major occupants*—those tenants, subtenants, or other persons or entities each of which uses at least 40 % of the leasable area of the *property* or any anchor tenant when the *property* is a shopping center.

3.3.21 *obvious*—that which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while *visually or physically observing the property*.

3.3.22 *other historical sources*—any source or sources other than those designated in 7.3.4.1 through 7.3.4.8 that are credible to a reasonable person and that identify past uses of the property. The term includes, but is not limited to: miscellaneous maps, newspaper archives, and records in the files and/or personal knowledge of the *property owner* and/or *occupants*. See 7.3.4.9.

3.3.23 *physical setting sources*—sources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a *property*. See 7.2.3.

3.3.24 *practically reviewable*—information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the *property* without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the user can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the *property* or a geographic area in which the *property* is located are not generally *practically reviewable*. Most databases of public records are *practically reviewable* if they can be obtained from the source agency by the county, city, zip code, or other geographic area of the facilities listed in the record system. Records that are sorted, filed, organized, or maintained by the source agency only chronologically are not generally practically reviewable. Listings in publicly available records which do not have adequate address information to be located geographically are not generally considered pratically

New - not in ASTM E 1527-94

New

reviewable. For large databases with numerous facility records (such as RCRA hazardous waste generators and registered underground storage tanks), the records are not *practically reviewable* unless they can be obtained from the source agency in the smaller geographic area of zip codes. Even when information is provided by zip code for some large databases, it is common for an unmanageable number of sites to be identified within a given zip code. In these cases, it is not necessary to review the impact of all of the sites that are likely to be listed in any given zip code because that information would not be *practically reviewable*. In other words, when so much data is generated that it cannot be feasibly reviewed for its impact on the *property*, it is not *practically reviewable*.

3.3.25 *preparer*—the person preparing the *transaction screen questionnaire* pursuant to Practice E 1528, who may be either the user or the person to whom the user has delegated the preparation of the *transaction screen questionnaire*.

3.3.26 *publicly available*—information that is publicly available means that the source of the information allows access to the information by anyone upon request.

3.3.27 *reasonably ascertainable*—for purposes of both this practice and Practice E 1528, information that is (*1*) *publicly available*, (*2*) obtainable from its source within reasonable time and cost constraints, and (*3*) *practically reviewable*.

3.3.28 *recognized environmental conditions*—the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, groundwater, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

3.3.29 *records review*—that part that is contained in Section 7 of this practice addresses which records shall or may be reviewed.

3.3.30 *site reconnaissance*—that part that is contained in Section 8 of this practice and addresses what should be done in connection with the *site visit*. The site reconnaissance includes, but is not limited to, the *site visit* done in connection with such a Phase I Environmental Site Assessment.

3.3.31 *site visit*—the visit to the property during which observations are made constituting the *site reconnaissance* section of this practice and the *site visit* requirement of Practice E 1528.

3.3.32 *standard environmental record sources*—those records specified in 7.2.1.1.

3.3.33 *standard historical sources*—those sources of information about the history of uses of property specified in 7.3.4.

3.3.34 *standard physical setting source*—a current USGS 7.5 minute topographic map (if any) showing the area on which the property is located. See 7.2.3.

3.3.35 *standard practice(s)*—the activities set forth in either and both this practice and Practice E 1528.

3.3.36 *standard sources*—sources of environmental, physical setting, or historical records specified in Section 7 of this practice.

3.3.37 *transaction screen process*—the process described in Practice E 1528.

3.3.38 *transaction screen questionnaire*—the questionnaire provided in Section 6 of Practice E 1528.

3.3.39 *user*—the party seeking to use Practice E 1528 to perform an *environmental site assessment* of the *property*. A user may include, without limitation, a purchaser of *property*, a potential tenant of property, an *owner* of *property*, a lender, or a property manager.

3.3.40 *visually and/or physically observed*—during a *site visit* pursuant to Practice E 1528, or pursuant to this practice, this term means observations made by vision while walking through a *property* and the structures located on it and observations made by the sense of smell, particularly observations of noxious or foul odors. The term "walking through" is not meant to imply that disabled persons who cannot physically walk may not conduct a *site visit*; they may do so by the means at their disposal for moving through the *property* and the structures located on it.

3.4 *Acronyms:*

Acronym for ASTM in E 1527-94 is deleted in E 1527-97

3.4.1 *CERCLA*—Comprehensive Environmental Response, Compensation and Liability Act of 1980 (as amended, 42 USC § 9601 *et seq.*).

3.4.2 *CERCLIS*—Comprehensive Environmental Response, Compensation and Liability Information System (maintained by EPA).

3.4.3 *CFR*—Code of Federal Regulations.

3.4.4 *CORRACTS*—TSD facilities subject to Corrective Action under RCRA.

New - not in ASTM E 1527-94

3.4.5 *EPA*—United States Environmental Protection Agency.

3.4.6 *EPCRA*—Emergency Planning and Community Right to Know Act ((also known as SARA Title III), 42 USC § 11001 *et seq.*).

3.4.7 *ERNS*—emergency response notification system.

3.4.8 *ESA*—environmental site assessment (different than an *environmental audit*; see 3.3.12).

3.4.9 *FOIA*—U.S. Freedom of Information Act (5 USC 552 *et seq.*).

3.4.10 *FR*—Federal Register.

3.4.11 *LUST*—leaking underground storage tank.

3.4.12 *MSDS*—material safety data sheet.

3.4.13 *NCP*—National Contingency Plan.

3.4.14 *NPDES*—national pollutant discharge elimination system.

3.4.15 *NPL*—national priorities list.

3.4.16 *PCBs*—polychlorinated biphenyls.

3.4.17 *PRP*—potentially responsible party (pursuant to CERCLA 42 USC § 9607(a)).

3.4.18 *RCRA*—Resource Conservation and Recovery Act (as amended, 42 USC § 6901 *et seq.*).

3.4.19 *SARA*—Superfund Amendments and Reauthorization Act of 1986 (amendment to CERCLA).

3.4.20 *USC*—United States Code.

3.4.21 *USGS*—United States Geological Survey.

3.4.22 *UST*—underground storage tank.

4. Significance and Use

4.1 *Uses*—This practice is intended for use on a voluntary basis by parties who wish to assess the environmental condition of *commercial real estate*. While use of this practice is intended to constitute *appropriate inquiry* for purposes of CERCLA's *innocent landowner defense*, it is not intended that its use be limited to that purpose. This practice is intended primarily as an approach to conducting an inquiry designed to identify *recognized environmental conditions* in connection with a *property*, and *environmental site assessments* that are both more and less comprehensive than this practice (including, in some instances, no *environmental site assessment*) may be appropriate in some circumstances. Further, no implication is intended that a person must use this practice in order to be deemed to have conducted inquiry in a commercially prudent or reasonable manner in any particular transaction. Nevertheless, this practice is intended to reflect a commercially prudent and reasonable inquiry.

4.2 *Clarifications on Use:*

4.2.1 *Use Not Limited to CERCLA*—This practice and Practice E 1528 are designed to assist the *user* in developing information about the environmental condition of a *property* and as such has utility for a wide range of persons, including those who may have no actual or potential CERCLA liability and/or may not be seeking the *innocent landowner defense*.

4.2.2 *Residential Tenants/Purchasers and Others*—No implication is intended that it is currently customary practice for residential tenants of multifamily residential buildings, tenants of single-family homes or other residential real estate, or purchasers of dwellings for one's own residential use, to conduct an *environmental site assessment* in connection with these transactions. Thus, these transactions are not included in the term commercial real estate transactions, and it is not intended to imply that such persons are obligated to conduct an *environmental site assessment* in connection with these transactions for purposes of *appropriate inquiry* or for any other purpose. In addition, no implication is intended that it is currently customary practice for *environmental site assessments* to be conducted in other unenumerated instances (including but not limited to many commercial leasing transactions, many acquisitions of easements, and many loan transactions in which the lender has multiple remedies). On the other hand, anyone who elects to do an *environmental site assessment* of any *property* or portion of a property may, in such person's judgment, use either this practice or Practice E 1528.

4.2.3 *Site-Specific*—This practice is site-specific in that it relates to assessment of environmental conditions on a specific parcel of *commercial real estate*. Consequently, this practice does not address many additional issues raised in transactions such as purchases of business entities, or interests therein, or of their assets, that may well involve environmental liabilities pertaining to properties previously owned or operated or other off-site environmental liabilities.

4.3 *Two Related Practices*—This practice sets forth one procedure for an *environmental site assessment* known as a "Phase I Environmental Site Assessment" or a "Phase I ESA" or simply a "Phase I." This practice is a companion to Practice E 1528. These practices are each intended to meet the standard of *appropriate inquiry* necessary to qualify for the *innocent landowner defense*. It is essential to consider that these practices, taken together, provide for two alternative practices of *appropriate inquiry*.

4.3.1 *Election to Commence with Either Practice*—The *user* may commence inquiry to identify *recognized environmental conditions* in connection with a *property* by performing either the *transaction screen process*, or the Phase I Environmental Site Assessment given in this practice.

4.3.2 *Who May Conduct*—The *transaction screen process* may be conducted either by the *user* (including an agent or employee of the user) or wholly or partially by an *environmental professional*. The *transaction screen process* does not require the judgment of an *environmental professional*. Whenever a Phase I Environmental Site Assessment is conducted, it must be performed by an *environmental professional* to the extent specified in 6.5.1. Further, at the Phase I Environmental Site Assessment level, no practical standard can be designed to eliminate the role of judgment and the value and need for experience in the party performing the inquiry. The professional judgment of an *environmental professional* is, consequently, vital to the performance of appropriate inquiry at the Phase I Environmental Site Assessment level.

4.4 *Additional Services*—As set forth in 11.9, additional services may be contracted for between the *user* and the *environmental professional*.

4.5 *Principles*—The following principles are an integral part of both practices and are intended to be referred to in resolving any ambiguity or exercising such discretion as is accorded the *user* or *environmental professional* in performing an *environmental site assessment* or in judging whether a *user* or *environmental professional* has conducted *appropriate inquiry* or has otherwise conducted an adequate *environmental site assessment*.

4.5.1 *Uncertainty Not Eliminated*—No *environmental site assessment* can wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a *property*. Performance of this practice or E 1528 is intended to reduce, but not eliminate, uncertainty regarding the potential for *recognized environmental conditions* in connection with a property, and both practices recognize reasonable limits of time and cost.

4.5.2 *Not Exhaustive—Appropriate inquiry* does not mean an exhaustive assessment of a clean *property*. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an *environmental site assessment* and the reduction of uncertainty about unknown conditions resulting from additional information.

4.5.3 *Level of Inquiry Is Variable*—Not every *property* will warrant the same level of assessment. Consistent with good commercial or customary practice, the appropriate level of *environmental site assessment* will be guided by the type of *property* subject to assessment, the expertise and risk tolerance of the *user*, and the information developed in the course of the inquiry.

4.5.4 *Comparison With Subsequent Inquiry*—It should

not be concluded or assumed that an inquiry was not *appropriate inquiry* merely because the inquiry did not identify *recognized environmental conditions* in connection with a *property*. *Environmental site assessments* must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent *environmental site assessments* should not be considered valid standards to judge the appropriateness of any prior assessment based on hindsight, new information, use of developing technology or analytical techniques, or other factors.

4.6 *Continued Viability of Environmental Site Assessment*—An *environmental site assessment* meeting or exceeding either Practice E 1528 or this practice and completed less than 180 days previously is presumed to be valid. An *environmental site assessment* meeting or exceeding either practice and completed more than 180 days previously may be used to the extent allowed by 4.7 through 4.7.5.

4.7 *Prior Assessment Usage*—Both Practice E 1528 and this practice recognize that *environmental site assessments* performed in accordance with these practices will include information that subsequent *users* may want to use to avoid undertaking duplicative assessment procedures. Therefore, the practices describe procedures to be followed to assist users in determining the appropriateness of using information in *environmental site assessments* performed previously. The system of prior assessment usage is based on the following principles that should be adhered to in addition to the specific procedures set forth elsewhere in these practices:

4.7.1 *Use of Prior Information*—Subject to 4.7.4, *users* and *environmental professionals* may use information in prior *environmental site assessments* provided such information was generated as a result of procedures that meet or exceed the requirements of this practice or Practice E 1528 and then only provided that the specific procedures set forth in the appropriate practice are met.

4.7.2 *Prior Assessment Meets or Exceeds*—Subject to 4.7.4, a prior *environmental site assessment* may be used in its entirety, without regard to the specific procedures set forth in these practices, if, in the reasonable judgment of the *user*: the prior *environmental site assessment* meets or exceeds the requirements of Practice E 1528 or this practice and the conditions at the *property* likely to affect *recognized environmental conditions* in connection with the *property* are not likely to have changed materially since the prior *environmental site assessment* was conducted. In making this judgment, the *user* should consider the type of *property* assessed and the conditions in the area surrounding the *property*.

4.7.3 *Current Investigation*—Except as provided in 4.7.2 and 4.7.2 of Practice E 1528 prior *environmental site assessments* should not be used without current investigation of conditions likely to affect *recognized environmental conditions* in connection with the *property* that may have changed materially since the prior *environmental site assessment* was conducted. At a minimum, for a Phase I Environmental Site Assessment consistent with this practice, a new *site reconnaissance*, interviews, and an update of the *records review* should be performed.

4.7.4 *Actual Knowledge Exception*—If the *user* or *environmental professional(s)* conducting an *environmental site assessment* has *actual knowledge* that the information being used from a prior *environmental site assessment* is not accurate or if it is *obvious*, based on other information obtained by means of the *environmental site assessment* or known to the person conducting the *environmental site assessment*, that the information being used is not accurate, such information from a prior *environmental site assessment* may not be used.

4.7.5 *Contractual Issues Regarding Prior Assessment Usage*—The contractual and legal obligations between prior and subsequent *users* of *environmental site assessments* or between *environmental professionals* who conducted prior *environmental site assessments* and those who would like to use such prior *environmental site assessments* are beyond the scope of this practice.

4.8 *Rules of Engagement*—The contractual and legal obligations between an *environmental professional* and a *user* (and other parties, if any) are outside the scope of this practice. No specific legal relationship between the *environmental professional* and the user is necessary for the *user* to meet the requirements of this practice.

5. User's Responsibilities

5.1 *Scope*—The purpose of this section is to describe tasks that will help identify the possibility of *recognized environmental conditions* in connection with the *property*. These tasks do not require the technical expertise of an *environmental professional* and are generally not performed by *environmental professionals* performing a Phase I Environmental Site Assessment. They may be performed by the *user*.

5.2 *Checking Title Records for Environmental Liens*—*Reasonably ascertainable recorded land title records* (see 7.3.4.4) should be checked to identify *environmental liens*, if any, that are currently recorded against the *property*. Any *environmental liens* so identified shall be reported to the *environmental professional* conducting a Phase I Environmental Site Assessment. This practice does not impose on the *environmental professional* the responsibility to check for recorded *environmental liens*. Rather the *user* should check or engage a title company or title professional to check *reasonably ascertainable recorded land title records* for *environmental liens* currently recorded against the *property*.

5.2.1 *Reasonably Ascertainable*—Environmental liens that are unrecorded or are recorded any place other than *recorded land title records* are not considered to be in *recorded land title records* that are *reasonably ascertainable*. *Recorded land title records* need not be checked if they otherwise do not meet the definition of the term *reasonably ascertainable*.

5.3 *Specialized Knowledge or Experience of the User*—If the *user* is aware of any specialized knowledge or experience that is material to *recognized environmental conditions* in connection with the *property*, it is the user's responsibility to communicate any information based on such specialized knowledge or experience to the *environmental professional*. The *user* should do so before the *environmental professional* does the *site reconnaissance*.

5.4 *Reason for Significantly Lower Purchase Price*—In a transaction involving the purchase of a parcel of *commercial real estate*, if a user has *actual knowledge* that the purchase price of the *property* is significantly less than the purchase

price of comparable properties, the *user* should try to identify an explanation for the lower price and to make a written record of such explanation. Among the factors to consider will be the information that becomes known to the *user* pursuant to the Phase I Environmental Site Assessment.

6. Phase I Environmental Site Assessment

6.1 *Objective*—The purpose of this Phase I Environmental Site Assessment is to identify, to the extent feasible pursuant to the processes prescribed herein, recognized environmental conditions in connection with the property. (See 1.1.1.)

6.2 *Four Components*—A Phase I Environmental Site Assessment shall have four components, as described as follows:

6.2.1 *Records Review*—Review of records; see Section 7,

6.2.2 *Site Reconnaissance*—A visit to the property; see Section 8,

6.2.3 *Interviews:*

6.2.3.1 Interviews with current *owners* and *occupants* of the property; see Section 9, and

6.2.3.2 Interviews with local government officials; see Section 10, and

6.2.4 *Report*—Evaluation and report; see Section 11.

6.3 *Coordination of Parts:*

6.3.1 *Parts Used in Concert*—The *records review*, *site reconnaissance*, and *interviews* are intended to be used in concert with each other. If information from one source indicates the need for more information, other sources may be available to provide information. For example, if a previous use of the *property* as a gasoline station is identified through the *records review*, but the present *owner* and *occupants* interviewed report no knowledge of an underground storage tank, the person conducting the *site reconnaissance* should be alert for signs of the presence of an underground storage tank.

6.3.2 *User Obligations*—The *environmental professional* shall note in the report whether or not the *user* has reported to the *environmental professional* any *environmental liens* encumbering the *property* or any specialized knowledge or experience of the *user* that would provide important information about previous ownership or uses of the *property* that may be material to identifying *recognized environmental conditions*.

6.4 *No Sampling*—This practice does not include any testing or sampling of materials (for example, soil, water, air, building materials).

"e.g." in ASTM E 1527-94

6.5 *Who May Conduct a Phase I:*

6.5.1 *Environmental Professional's Duties*—The *interviews* and *site reconnaissance*, as well as review and interpretation of information upon which the report is based and overseeing the writing of the report, are all portions of a Phase I Environmental Site Assessment that shall be performed by an *environmental professional* or *environmental professionals*. If more than one environmental professional is involved in these tasks, they shall coordinate their efforts.

6.5.2 *Environmental Professional Supervision*—Information for the *records review* needed for completion of a Phase I Environmental Site Assessment may be provided by a number of parties including government agencies, third-party vendors, the *user*, and present and past *owners* and *occupants* of the *property*, provided that the information is obtained by or under the supervision of an *environmental professional* or is obtained by a third-party vendor specializing in retrieval of the information specified in Section 7. Prior assessments may also contain information that will be appropriate for usage in a current *environmental site assessment* provided the prior usage procedures set forth in Sections 7, 8, and 9 are followed. The *environmental professional(s)* participating in the *site reconnaissance* and responsible for the report shall review all of the information provided.

6.5.2.1 *Reliance*—An environmental professional is not required to verify independently the information provided but may rely on information provided unless he or she has *actual knowledge* that certain information is incorrect or unless it is *obvious* that certain information is incorrect based on other information obtained in the Phase I Environmental Site Assessment or otherwise actually known to the *environmental professional*.

7. Records Review

7.1 *Introduction:*

7.1.1 *Objective*—The purpose of the *records review* is to obtain and review records that will help identify *recognized environmental conditions* in connection with the *property*.

7.1.2 *Approximate Minimum Search Distance*—Some records to be reviewed pertain not just to the *property* but also pertain to properties within an additional *approximate minimum search distance* in order to help assess the likelihood of problems from migrating *hazardous substances* or *petroleum products*. When the term *approximate minimum search distance* includes areas outside the *property*, it shall be measured from the nearest *property* boundary. The term *approximate minimum search distance* is used in lieu of radius in order to include irregularly shaped properties.

7.1.2.1 *Reduction of Approximate Minimum Search Distance*—When allowed by 7.2.1.1, the *approximate minimum search distance* for a particular record may be reduced in the discretion of the environmental professional. Factors to consider in reducing the *approximate minimum search distance* include: (*1*) the density (for example, urban, rural, or suburban) of the setting in which the *property* is located; (*2*) the distance that the *hazardous substances* or *petroleum products* are likely to migrate based on local geologic or hydrogeologic conditions; and (*3*) other reasonable factors. The justification for each reduction and the *approximate minimum search distance* actually used for any particular record shall be explained in the report. If the *approximate minimum search distance* is specified as "property only," then the search shall be limited to the *property* and may not be reduced unless the particular record is not *reasonably ascertainable*.

7.1.3 *Accuracy and Completeness*—Accuracy and completeness of record information varies among information sources, including governmental sources. Record information is often inaccurate or incomplete. The *user* or *environmental professional* is not obligated to identify mistakes or insufficiencies in information provided. However, the *environmental professional* reviewing records shall make a reasonable effort to compensate for mistakes or insufficiencies in the information reviewed that are *obvious* in light of other

New - not in ASTM E 1527-94

information of which the *environmental professional* has *actual knowledge.*

7.1.4 *Reasonably Ascertainable/Standard Sources*—Availability of record information varies from information source to information source, including governmental jurisdictions. The *user* or *environmental professional* is not obligated to identify, obtain, or review every possible record that might exist with respect to a *property.* Instead, this practice identifies record information that shall be reviewed from standard sources, and the *user* or *environmental professional* is required to review only record information that is reasonably ascertainable from those standard sources. Record information that is *reasonably ascertainable* means (*1*) information that is publicly available, (*2*) information that is obtainable from its source within reasonable time and cost constraints, and (*3*) information that is *practically reviewable.*

7.1.4.1 *Publicly Available*—Information that is *publicly available* means that the source of the information allows access to the information by anyone upon request.

7.1.4.2 *Reasonable Time and Cost*—Information that is obtainable within reasonable time and cost constraints means that the information will be provided by the source within 20 calendar days of receiving a written, telephone, or in-person request at no more than a nominal cost intended to cover the source's cost of retrieving and duplicating the information. Information that can only be reviewed by a visit to the source is *reasonably ascertainable* if the visit is permitted by the source within 20 days of request.

7.1.4.3 *Practically Reviewable*—Information that is *practically reviewable* means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the *property* without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the *user* can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the *property* or a geographic area in which the *property* is located are not generally *practically reviewable.* Most databases of public records are practically reviewable if they can be obtained from the source agency by the county, city, zip code, or other geographic area of the facilities listed in the record system. Records that are sorted, filed, organized, or maintained by the source agency only chronologically are not generally *practically reviewable.* Listings in publicly available records which do not have adequate address information to be located geographically are not generally considered practically reviewable. For large databases with numerous facility records (such as RCRA generators and registered USTs), the records are not *practically reviewable* unless they can be obtained from the source agency in the smaller geographic area of zip codes. Even when information is provided by zip code for some large databases, it is common for an unmanageable number of sites to be identified within a given zip code. In these cases, it is not necessary to review the impact of all of the sites that are likely to be listed in any given zip code because that information would not be *practically reviewable.* In other words, when so much data is generated that it cannot be feasibly reviewed for its impact on the *property,* it is not required to be reviewed.

7.1.5 *Alternatives to Standard Sources*—Alternative sources may be used instead of standard sources if they are of similar or better reliability and detail, or if a *standard source* is not *reasonably ascertainable.*

7.1.6 *Coordination*—If records are not *reasonably ascertainable* from *standard sources* or alternative sources, the *environmental professional* shall attempt to obtain the requested information by other means specified in this practice such as questions posed to the current *owner* or *occupant(s)* of the *property* or appropriate persons available at the source at the time of the request.

7.1.7 *Sources of Standard Source Information*—*Standard source* information or other record information from government agencies may be obtained directly from appropriate government agencies or from commercial services. Government information obtained from nongovernmental sources may be considered current if the source updates the information at least every 90 days or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public.

7.1.8 *Documentation of Sources Checked*—The report shall document each source that was used, even if a source revealed no findings. Sources shall be sufficiently documented, including name, date request for information was filled, date information provided was last updated by source, date information was last updated by original source (if provided other than by original source; see 7.1.7) so as to facilitate reconstruction of the research at a later date.

7.1.9 *Significance*—If a standard *environmental record source* (or other sources in the course of conducting the *Phase I Environmental Site Assessment*) identifies the *property* or another site within the *approximate minimum search distance,* the report shall include the *environmental professional's* judgment about the significance of the listing to the analysis of *recognized environmental conditions* in connection with the *property* (based on the data retrieved pursuant to 7.2, additional information from the government source, or other sources of information). In doing so, the *environmental professional* may make statements applicable to multiple sites (for example, a statement to the effect that none of the sites listed is likely to have a negative impact on the property except . . .).

7.2 *Environmental Information:*

7.2.1 *Standard Environmental Sources*—The following *standard environmental record sources* shall be reviewed, subject to the conditions of 7.1.1 through 7.1.7:

7.2.1.1 *Standard Environmental Record Sources: Federal and State*—The *approximate minimum search distance* may be reduced, pursuant to 7.1.2.1, for any of these *standard environmental record sources* except the Federal NPL site list and Federal RCRA TSD list.

New - not in ASTM E 1527-94

	Approximate Minimum Search Distance, miles (kilometres)
Federal NPL site list	1.0 (1.6)
Federal CERCLIS list	0.5 (0.8)
Federal RCRA CORRACTS TSD facilities list	1.0 (1.6)
Federal RCRA non-CORRACTS TSD facilities list	0.5 (0.8)
Federal RCRA generators list	property and adjoining properties
Federal ERNS list	property only
State lists of hazardous waste sites identified for investigation or remediation:	
State-equivalent NPL	1.0 (1.6)
State-equivalent CERCLIS	0.5 (0.8)
State landfill and/or solid waste disposal site lists	0.5 (0.8)
State leaking UST lists	0.5 (0.8)
State registered UST lists	property and adjoining properties

Reduced from ASTM E 1527-94

7.2.2 *Additional Environmental Record Sources: State or Local*—One or more additional state sources or local sources of environmental records may be checked, in the discretion of the *environmental professional*, to enhance and supplement federal and state sources identified above. Factors to consider in determining which local or additional state records, if any, should be checked include (*1*) whether they are *reasonably ascertainable*, (*2*) whether they are sufficiently useful, accurate, and complete in light of the objective of the *records review* (see 7.1.1), and (*3*) whether they are generally obtained, pursuant to local good commercial or customary practice, in initial *environmental site assessments* in the type of *commercial real estate* transaction involved. To the extent additional state sources or local sources are used to supplement the same record types listed above, *approximate minimum search distances* should not be less than those specified above (adjusted as provided in 7.2.1.1 and 7.1.2.1). Some types of records and sources that may be useful include:

Types of Local Records

Lists of Landfill/Solid Waste Disposal Sites
Lists of Hazardous Waste/Contaminated Sites
Lists of Registered Underground Storage Tanks
Records of Emergency Release Reports (SARA § 304)
Records of Contaminated Public Wells

Local Sources

Department of Health/Environmental Division
Fire Department
Planning Department
Building Permit/Inspection Department
Local/Regional Pollution Control Agency
Local/Regional Water Quality Agency
Local Electric Utility Companies (for records relating to PCBs)

7.2.3 *Physical Setting Sources*—A current USGS 7.5 Minute Topographic Map (or equivalent) showing the area on which the *property* is located shall be reviewed, provided it is *reasonably ascertainable*. It is the only *standard physical setting source* and the only *physical setting source* that is required to be obtained (and only if it is *reasonably ascertainable*). One or more additional *physical setting sources* may be obtained in the discretion of the *environmental professional*. Because such sources provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a site, discretionary *physical setting sources* shall be sought when (*1*) conditions have been identified in which *hazardous substances* or *petroleum products* are likely to migrate to the *property* or from or within the *property* into the groundwater or soil and (*2*) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice in initial *environmental site assessments* in the type of *commercial real estate transaction* involved, in order to assess the impact of such migration on *recognized environmental conditions* in connection with the *property*.

Mandatory Standard Physical Setting Source

USGS—Current 7.5 Minute Topographic Map (or equivalent)

Discretionary and Non-Standard Physical Setting Sources

USGS and/or State Geological Survey—Groundwater Maps
USGS and/or State Geological Survey—Bedrock Geology Maps
USGS and/or State Geological Survey—Surficial Geology Maps
Soil Conservation Service—Soil Maps
Other Physical Setting Sources that are reasonably credible (as well as reasonably ascertainable)

7.3 *Historical Use Information:*

7.3.1 *Objective*—The objective of consulting historical sources is to develop a history of the previous uses of the *property* and surrounding area, in order to help identify the likelihood of past uses having led to *recognized environmental conditions* in connection with the *property*.

7.3.2 *Uses of the Property*—All *obvious* uses of the *property* shall be identified from the present, back to the *property's obvious* first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the *standard historical sources* in 7.3.4.1 through 7.3.4.8 as are necessary and both *reasonably ascertainable* and likely to be useful (as defined under *Data Failure* in 7.3.2.3). For example, if the *property* was developed in the 1700's, it might be feasible to identify uses back to the early 1900's, using sources such as *fire insurance maps* or *USGS 7.5 minute topographic maps* (or equivalent). Although other sources such as *recorded land title records* might go back to the 1700's, it would not be required to review them unless they were both *reasonably ascertainable* and likely to be useful. As another example, if the *property* was reportedly not developed until 1960, it would still be necessary to confirm that it was undeveloped back to 1940. Such confirmation may come from one or more of the *standard historical sources* specified in 7.3.4.1 through 7.3.4.8, or it may come from *other historical sources* (such as someone with personal knowledge of the *property*; see 7.3.4.9). However, checking other historical sources (see 7.3.4.9) would not be required. For purposes of 7.3.2, the term "developed use" includes agricultural uses and placement of fill. The report

New - not in ASTM E 1527-94

shall describe all identified uses, justify the earliest date identified (for example, records showed no development of the *property* prior to the specific date), and explain the reason for any gaps in the history of use (for example, *data failure*).

7.3.2.1 *Intervals*—Review of *standard historical sources* at less than approximately five year intervals is not required by this practice (for example, if the *property* had one use in 1950 and another use in 1955, it is not required to check for a third use in the intervening period). If the specific use of the *property* appears unchanged over a period longer than five years, then it is not required by this practice to research the use during that period (for example, if *fire insurance maps* show the same apartment building in 1940 and 1960, then the period in between need not be researched).

7.3.2.2 *General Type of Use*—In identifying previous uses, more specific information about uses is more helpful than less specific information, but it is sufficient, for purposes of 7.3.2, to identify the general type of use (for example: office, retail, and residential) unless it is *obvious* from the source(s) consulted that the use may be more specifically identified. However, if the general type of use is industrial or manufacturing (for example, *zoning/land use records* show industrial zoning), then additional *standard historical sources* should be reviewed if they are likely to identify a more specific use and are *reasonably ascertainable*, subject to the constraints of *data failure* (see 7.3.2.3).

7.3.2.3 *Data Failure*—A *standard historical source* may be excluded *(1)* if the source is not *reasonably ascertainable*, or *(2)* if past experience indicates that the source is not likely to be sufficiently useful, accurate, or complete in terms of satisfying 7.3.2. *Other historical sources* specified in 7.3.4.9 may be used to satisfy 7.3.2, 7.3.2.1, and 7.3.2.2, but are not required to comply with this practice. Whatever history of previous uses is derived from checking the *standard historical sources* specified in 7.3.4.1 through 7.3.4.8 (except those excluded by *(1)* and *(2)* of 7.3.2.3) shall be deemed sufficient historical use information to comply with this practice.

7.3.3 *Uses of Properties in Surrounding Area*—Uses in the area surrounding the *property* shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the *property* itself (for example, an *aerial photograph* or *fire insurance map* of the *property* will usually show the surrounding area). If the *environmental professional* uses sources that include the surrounding area, surrounding uses should be identified to a distance determined at the discretion of the *environmental professional* (for example, if an aerial photo shows the area surrounding the *property*, then the *environmental professional* shall determine how far out from the *property* the photo should be analyzed). Factors to consider in making this determination include, but are not limited to: the extent to which information is *reasonably ascertainable*; the time and cost involved in reviewing surrounding uses (for example, analyzing *aerial photographs* is relatively quick, but reviewing *property tax files* for adjacent properties or reviewing *local street directories* for more than the few streets that surround the site is typically too time-consuming); the extent to which information is useful, accurate, and complete in light of the purpose of the records review (see 7.1.1); the likelihood of the information being significant to *recognized environmental conditions* in connection with the *property*; the extent to which potential concerns are *obvious*; known hydrogeologic/geologic conditions that may indicate a high probability of *hazardous substances* or *petroleum products* migration to the property; how recently local development has taken place; information obtained from *interviews* and other sources; and local good commercial or customary practice.

7.3.4 *Standard Historical Sources:*

7.3.4.1 *Aerial Photographs*—The term "aerial photographs" means photographs taken from an airplane or helicopter (from a low enough altitude to allow identification of development and activities) of areas encompassing the *property*. Aerial photographs are often available from government agencies or private collections unique to a local area.

7.3.4.2 *Fire Insurance Maps*—The term *fire insurance maps* means maps produced by private fire insurance map companies that indicate uses of properties at specified dates and that encompass the *property*. These maps are often available at local libraries, historical societies, private resellers, or from the map companies who produced them.

7.3.4.3 *Property Tax Files*—The term *property tax files* means the files kept for property tax purposes by the local jurisdiction where the *property* is located and includes records of past ownership, appraisals, maps, sketches, photos, or other information that is *reasonably ascertainable* and pertaining to the *property*.

7.3.4.4 *Recorded Land Title Records*—The term *recorded land title records* means records of fee ownership, leases, land contracts, easements, liens, and other encumbrances on or of the *property* recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located. (Often such records are kept by a municipal or county recorder or clerk.) Such records may be obtained from title companies or directly from the local government agency. Information about the title to the *property* that is recorded in a U.S. district court or any place other than where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located, are not considered part of recorded land title records, because often this source will provide only names of previous owners, lessees, easement holders, etc. and little or no information about uses or occupancies of the *property*, but when employed in combination with another source recorded land title records may provide helpful information about uses of the *property*. *This source cannot be the sole historical source consulted. If this source is consulted, at least one additional standard historical source must also be consulted.*

7.3.4.5 *USGS 7.5 Minute Topographic Maps*—The term *USGS 7.5 Minute Topographic Maps* means the map (if any) available from or produced by the United States Geological Survey, entitled "USGS 7.5 minute topographic map," and showing the property.

7.3.4.6 *Local Street Directories*—The term *local street directories* means directories published by private (or sometimes government) sources and showing ownership and/or use of sites by reference to street addresses. Often local street directories are available at libraries of local governments, colleges or universities, or historical societies.

7.3.4.7 *Building Department Records*—The term *building*

department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property. Often building department records are located in the *building department* of a municipality or county.

7.3.4.8 *Zoning/Land Use Records*—The term *zoning/land use records* means those records of the local government in which the property is located indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. They are often located in the *planning department* of a municipality or county.

7.3.4.9 *Other Historical Sources*—The term *other historical sources* means any source or sources other than those designated in 7.3.4.1 through 7.3.4.8 that are credible to a reasonable person and that identify past uses of the *property*. This category includes, but is not limited to: miscellaneous maps, newspaper archives, and records in the files and/or personal knowledge of the property *owner* and/or *occupants*.

7.4 *Prior Assessment Usage*—*Standard historical sources* reviewed as part of a prior *environmental site assessment* do not need to be searched for or reviewed again, but uses of the *property* since the prior *environmental site assessment* should be identified either through *standard historical sources* (as specified in 7.3) or by alternatives to *standard historical sources*, to the extent such information is reasonably ascertainable. (See 4.7.)

8. Site Reconnaissance

8.1 *Objective*—The objective of the *site reconnaissance* is to obtain information indicating the likelihood of identifying *recognized environmental* conditions in connection with the property.

8.2 *Observation*—On a visit to the *property* (the *site visit*), the *environmental professional* shall *visually and physically* observe the *property* and any structure(s) located on the *property* to the extent not obstructed by bodies of water, adjacent buildings, or other obstacles.

8.2.1 *Exterior*—The periphery of the *property* shall be *visually and physically observed*, as well as the periphery of all structures on the property, and the *property* should be viewed from all adjacent public thoroughfares. If roads or paths with no apparent outlet are observed on the *property*, the use of the road or path should be identified to determine whether it was likely to have been used as an avenue for disposal of *hazardous substances* or *petroleum products*.

8.2.2 *Interior*—On the interior of structures on the *property*, accessible common areas expected to be used by *occupants* or the public (such as lobbies, hallways, utility rooms, recreation areas, etc.), maintenance and repair areas, including boiler rooms, and a representative sample of *occupant* spaces, should be *visually and physically observed*. It is not necessary to look under floors, above ceilings, or behind walls.

8.2.3 *Methodology*—The *environmental professional* shall document, in the report, the method used (for example, grid patterns or other systematic approaches used for large properties, which spaces for *owner* or *occupants* were observed) to observe the *property*.

8.2.4 *Limitations*—The *environmental professional* shall document, in the report, general limitations and bases of review, including limitations imposed by physical obstructions such as adjacent buildings, bodies of water, asphalt, or other paved areas, and limiting conditions (for example, snow, rain).

"e.g." in ASTM E 1527-94

8.2.5 *Frequency*—It is not expected that more than one visit to the *property* shall be made by the *environmental professional* in connection with a *Phase I Environmental Site Assessment*. The one visit constituting part of the *Phase I Environmental Site Assessment* may be referred to as the *site visit*.

8.3 *Prior Assessment Usage*—The information supplied in connection with the *site reconnaissance* portion of a prior *environmental site assessment* may be used for guidance but shall not be relied upon without determining through a new *site reconnaissance* whether any conditions that are material to *recognized environmental conditions* in connection with the *property* have changed since the prior *environmental site assessment*.

8.4 *Uses and Conditions*—The *environmental professional(s)* conducting the *site reconnaissance* should note the uses and conditions specified in 8.4.1 through 8.4.4.8 to the extent *visually or physically observed* during the *site visit*. The uses and conditions specified in 8.4.1 through 8.4.4.8 should also be the subject of questions asked as part of *interviews* of *owners* and *occupants* (see Section 9). Uses and conditions to be noted shall be recorded in field notes of the *environmental professional(s)* conducting the *site reconnaissance* but are only required to be described in the report to the extent specified in 8.4.1 through 8.4.4.8. The *environmental professional(s)* performing the *Phase I Environmental Site Assessment* are obligated to identify uses and conditions only to the extent that they may be *visually and physically observed* on a *site visit*, as described in this practice, or to the extent that they are identified by the *interviews* (see Sections 9 and 10) or *record review* (see Section 7) processes described in this practice.

8.4.1 *General Site Setting:*

8.4.1.1 *Current Use(s) of the Property*—The current use(s) of the *property* shall be identified in the report. Any current uses likely to involve the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products* shall be identified in the report. Unoccupied occupant spaces should be noted. In identifying current uses of the *property*, more specific information is more helpful than less specific information. (For example, it is more useful to identify uses such as a hardware store, a grocery store, or a bakery rather than simply retail use.)

8.4.1.2 *Past Use(s) of the Property*—To the extent that indications of past uses of the *property* are *visually or physically observed* on the *site visit*, or are identified in the *interviews* or *record review*, they shall be identified in the report, and past uses so identified shall be described in the report if they are likely to have involved the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products*. (For example, there may be signs indicating a past use or a structure indicating a past use.)

8.4.1.3 *Current Uses of Adjoining Properties*—To the extent that current uses of *adjoining properties* are *visually or physically observed* on the *site visit*, or are identified in the *interviews* or *records review*, they shall be identified in the

"e.g." in ASTM E 1527-94

report, and current uses so identified shall be described in the report if they are likely to indicate *recognized environmental conditions* in connection with the *adjoining properties* or the *property*.

8.4.1.4 *Past Uses of Adjoining Properties*—To the extent that indications of past uses of *adjoining properties* are *visually or physically observed* on the *site visit*, or are identified in the *interviews* or *record review*, they shall be noted by the *environmental professional*, and past uses so identified shall be described in the report if they are likely to indicate *recognized environmental conditions* in connection with the *adjoining properties* or the *property*.

8.4.1.5 *Current or Past Uses in the Surrounding Area*—To the extent that the general type of current or past uses (for example, residential, commercial, industrial) of properties surrounding the *property* are *visually or physically observed* on the *site visit* or going to or from the *property* for the *site visit*, or are identified in the *interviews* or *record review*, they shall be noted by the *environmental professional*, and uses so identified shall be described in the report if they are likely to indicate *recognized environmental conditions* in connection with the *property*.

8.4.1.6 *Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions*—The topographic conditions of the *property* shall be noted to the extent *visually or physically observed* or determined from *interviews*, as well as the general topography of the area surrounding the *property* that is *visually or physically observed* from the periphery of the *property*. If any information obtained shows there are likely to be *hazardous substances* or *petroleum products* on the property or on nearby properties and those *hazardous substances* or *petroleum products* are of a type that may migrate, topographic observations shall be analyzed in connection with geologic, hydrogeologic, hydrologic, and topographic information obtained pursuant to *records review* (see 7.2.3) and *interviews* to evaluate whether *hazardous substances* or *petroleum products* are likely to migrate to the *property*, or within or from the *property*, into groundwater or soil.

8.4.1.7 *General Description of Structures*—The report shall generally describe the structures or other improvements on the *property*, for example: number of buildings, number of stories each, approximate age of buildings, ancillary structures (if any), etc.

8.4.1.8 *Roads*—Public thoroughfares adjoining the *property* shall be identified in the report and any roads, streets, and parking facilities on the *property* shall be described in the report.

8.4.1.9 *Potable Water Supply*—The source of potable water for the *property* shall be identified in the report.

8.4.1.10 *Sewage Disposal System*—The sewage disposal system for the *property* shall be identified in the report. Inquiry shall be made as to the age of the system as part of the process under Sections 7, 9, or 10.

8.4.2 *Interior and Exterior Observations:*

8.4.2.1 *Current Use(s) of the Property*—The current use(s) of the *property* shall be identified in the report. Any current uses likely to involve the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products* shall be identified in the report. Unoccupied *occupant* spaces should be noted. In identifying current uses of the *property*, more specific information is more helpful than less specific information. (For example, it is more useful to identify uses such as a hardware store, a grocery store, or a bakery rather than simply retail use.)

8.4.2.2 *Past Use(s) of the Property*—To the extent that indications of past uses of the *property* are *visually or physically observed* on the *site visit*, or are identified in the *interviews* or *records review*, they shall be identified in the report, and past uses so identified shall be described in the report if they are likely to have involved the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products*. (For example, there may be signs indicating a past use or a structure indicating a past use.)

8.4.2.3 *Hazardous Substances and Petroleum Products in Connection with Identified Uses*—To the extent that present uses are identified that use, treat, store, dispose of, or generate *hazardous substances* and *petroleum products* on the *property*: (*1*) the *hazardous substances* and *petroleum products* shall be identified or indicated as unidentified in the report, and (*2*) the approximate quantities involved, types of containers (if any) and storage conditions shall be described in the report. To the extent that past uses are identified that used, treated, stored, disposed of, or generated *hazardous substances* and *petroleum products* on the *property*, the information shall be identified to the extent it is *visually or physically observed* during the *site visit* or identified from the *interviews* or the *records review*.

8.4.2.4 *Storage Tanks*—Above ground storage tanks, or underground storage tanks or vent pipes, fill pipes or access ways indicating underground storage tanks shall be identified (for example, content, capacity, and age) to the extent *visually or physically observed* during the *site visit* or identified from the *interviews* or *records review*.

"e.g." 54 ASTM E 1527-94

8.4.2.5 *Odors*—Strong, pungent, or noxious odors shall be described in the report and their sources shall be identified in the report to the extent *visually or physically observed* or identified from the *interviews* or *records review*.

8.4.2.6 *Pools of Liquid*—Standing surface water shall be noted. Pools or *sumps* containing liquids likely to be *hazardous substances* or *petroleum products* shall be described in the report to the extent *visually or physically observed* or identified from the *interviews* or *records review*.

8.4.2.7 *Drums*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, *drums* shall be described in the report, whether or not they are leaking, unless it is known that their contents are not *hazardous substances* or *petroleum products* (in that case the contents should be described in the report). *Drums* often hold 55 gal (208 L) of liquid, but containers as small as 5 gal (19 L) should also be described.

8.4.2.8 *Hazardous Substance and Petroleum Products Containers (Not Necessarily in Connection With Identified Uses)*—When containers identified as containing *hazardous substances* or *petroleum products* are *visually or physically observed* on the *property* and are or might be a *recognized environmental condition*: the *hazardous substances* or *petroleum products* shall be identified or indicated as unidentified in the report, and the approximate quantities involved, types of containers, and storage conditions shall be described in the report.

8.4.2.9 *Unidentified Substance Containers*—When open

or damaged containers containing unidentified substances suspected of being *hazardous substances* or *petroleum products* are *visually or physically observed* on the *property*, the approximate quantities involved, types of containers, and storage conditions shall be described in the report.

8.4.2.10 *PCBs*—Electrical or hydraulic equipment known to contain PCBs or likely to contain PCBs shall be described in the report to the extent *visually or physically observed* or identified from the *interviews* or *records review*. Fluorescent light ballast likely to contain PCBs does not need to be noted.

8.4.3 *Interior Observations:*

8.4.3.1 *Heating/Cooling*—The means of heating and cooling the buildings on the property, including the fuel source for heating and cooling, shall be identified in the report (for example, heating oil, gas, electric, radiators from steam boiler fueled by gas).

8.4.3.2 *Stains or Corrosion*—To the extent *visually or physically observed* or identified from the *interviews*, stains or corrosion on floors, walls, or ceilings shall be described in the report, except for staining from water.

8.4.3.3 *Drains and Sumps*—To the extent *visually or physically observed* or identified from the *interviews*, floor drains and *sumps* shall be described in the report.

8.4.4 *Exterior Observations:*

8.4.4.1 *Pits, Ponds, or Lagoons*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, *pits, ponds, or lagoons* on the *property* shall be described in the report, particularly if they have been used in connection with waste disposal or waste treatment. *Pits, ponds, or lagoons* on *properties* adjoining the *property* shall be described in the report to the extent they are *visually or physically observed* from the *property* or identified in the *interviews* or *records review*.

8.4.4.2 *Stained Soil or Pavement*—To the extent *visually or physically observed* or identified from the *interviews*, areas of stained soil or pavement shall be described in the report.

8.4.4.3 *Stressed Vegetation*—To the extent *visually or physically observed* or identified from the *interviews*, areas of stressed vegetation (from something other than insufficient water) shall be described in the report.

8.4.4.4 *Solid Waste*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, areas that are apparently filled or graded by non-natural causes (or filled by fill of unknown origin) suggesting trash or other solid waste disposal, or mounds or depressions suggesting trash or other solid waste disposal, shall be described in the report.

8.4.4.5 *Waste Water*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, waste water or other liquid (including storm water) or any discharge into a drain, ditch, or stream on or adjacent to the *property* shall be described in the report.

8.4.4.6 *Wells*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, all wells (including dry wells, irrigation wells, injection wells, abandoned wells, or other wells) shall be described in the report.

8.4.4.7 *Septic Systems*—To the extent *visually or physically observed* or identified from the *interviews* or *records review*, indications of on-site septic systems or cesspools should be described in the report.

9. Interviews With Owners and Occupants

9.1 *Objective*—The objective of *interviews* is to obtain information indicating *recognized environmental conditions* in connection with the *property*.

9.2 *Content*—Interviews with *owners* and *occupants* consist of questions to be asked in the manner and of persons as described in this section. The content of questions to be asked shall attempt to obtain information about uses and conditions as described in Section 8, as well as information described in 9.8 and 9.9.

9.3 *Medium*—Questions to be asked pursuant to this section may be asked in person, by telephone, or in writing, in the discretion of the *environmental professional*.

9.4 *Timing*—Except as specified in 9.8 and 9.9, it is in the discretion of the *environmental professional* whether to ask questions before, during, or after the *site visit* described in Section 8, or in some combination thereof.

9.5 *Who Should be Interviewed:*

9.5.1 *Key Site Manager*—Prior to the *site visit*, the *owner* should be asked to identify a person with good knowledge of the uses and physical characteristics of the *property* (the *key site manager*). Often the *key site manager* will be the property manager, the chief physical plant supervisor, or head maintenance person. (If the *user* is the current *property* owner, the user has an obligation to identify a *key site manager*, even if it is the *user* himself or herself.) If a *key site manager* is identified, the person conducting the *site visit* shall make at least one reasonable attempt (in writing or by telephone) to arrange a mutually convenient appointment for the *site visit* when the *key site manager* agrees to be there. If the attempt is successful, the *key site manager* shall be interviewed in conjunction with the *site visit*. If such an attempt is unsuccessful, when conducting the *site visit*, the *environmental professional* shall inquire whether an identified *key site manager* (if any) or if a person with good knowledge of the uses and physical characteristics of the *property* is available to be interviewed at that time; if so, that person shall be interviewed. In any case, it is within the discretion of the *environmental professional* to decide which questions to ask before, during, or after the *site visit* or in some combination thereof.

9.5.2 *Occupants*—A reasonable attempt shall be made to interview a reasonable number of *occupants* of the *property*.

9.5.2.1 *Multi-Family Properties*—For multi-family residential properties, residential *occupants* do not need to be interviewed, but if the *property* has nonresidential uses, interviews should be held with the nonresidential *occupants* based on criteria specified in 9.5.2.2.

9.5.2.2 *Major Occupants*—Except as specified in 9.5.2.1, if the *property* has five or fewer current *occupants*, a reasonable attempt shall be made to interview a representative of each one of them. If there are more than five current *occupants*, a reasonable attempt shall be made to interview the *major occupant(s)* and those other *occupants* whose operations are likely to indicate *recognized environmental conditions* in connection with the *property*.

9.5.2.3 *Reasonable Attempts to Interview*—Examples of reasonable attempts to interview those *occupants* specified in 9.5.2.2 include (but are not limited to) an attempt to interview such *occupants* when making the *site visit* or calling such *occupants* by telephone. In any case, when there

are several *occupants* to interview, it is not expected that the *site visit* must be scheduled at a time when they will all be available to be interviewed.

9.5.2.4 *Occupant Identification*—The report shall identify the occupants interviewed and the duration of their occupancy.

9.5.3 *Prior Assessment Usage*—Persons interviewed as part of a prior *Phase I Environmental Site Assessment* consistent with this practice do not need to be questioned again about the content of answers they provided at that time. However, they should be questioned about any new information learned since that time, or others should be questioned about conditions since the prior *Phase I Environmental Site Assessment* consistent with this practice.

9.6 *Quality of Answers*—The person(s) interviewed should be asked to be as specific as reasonably feasible in answering questions. The person(s) interviewed should be asked to answer in good faith and to the extent of their knowledge.

9.7 *Incomplete Answers*—While the person conducting the interview(s) has an obligation to ask questions, in many instances the persons to whom the questions are addressed will have no obligation to answer them.

9.7.1 *User*—If the person to be interviewed is the user (the person on whose behalf the *Phase I Environmental Site Assessment* is being conducted), the *user* has an obligation to answer all questions posed by the person conducting the interview, in good faith, to the extent of his or her *actual knowledge* or to designate a *key site manager* to do so. If answers to questions are unknown or partially unknown to the *user* or such *key site manager*, this *interview* section of the *Phase I Environmental Site Assessment* shall not thereby be deemed incomplete.

9.7.2 *Non-user*—If the person conducting the interview(s) asks questions of a person other than a user but does not receive answers or receives partial answers, this section of the *Phase I Environmental Site Assessment* shall not thereby be deemed incomplete, provided that (*1*) the questions have been asked (or attempted to be asked) in person or by telephone and written records have been kept of the person to whom the questions were addressed and the responses, or (*2*) the questions have been asked in writing sent by first class mail or by private, commercial carrier and no answer or incomplete answers have been obtained and at least one reasonable follow up (telephone call or written request) was made again asking for responses.

9.8 *Questions About Helpful Documents*—Prior to the *site visit*, the *property owner*, *key site manager* (if any is identified), and *user* (if different from the *property owner*) shall be asked if they know whether any of the documents listed in 9.8.1 exists and, if so, whether copies can and will be provided to the *environmental professional* within reasonable time and cost constraints. Even partial information provided may be useful. If so, the *environmental professional* conducting the *site visit* shall review the available documents prior to or at the beginning of the *site visit*.

9.8.1 *Helpful Documents:*

9.8.1.1 Environment site assessment reports,

9.8.1.2 Environment audit reports,

9.8.1.3 Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits),

9.8.1.4 Registrations for underground and above-ground storage tanks,

9.8.1.5 Material safety data sheets,

9.8.1.6 Community right-to-know plan,

9.8.1.7 Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc.,

9.8.1.8 Reports regarding hydrogeologic conditions on the property or surrounding area,

9.8.1.9 Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property,

9.8.1.10 Hazardous waste generator notices or reports, and

9.8.1.11 Geotechnical studies.

9.9 *Proceedings Involving the Property*—Prior to the *site visit*, the *property owner*, *key site manager* (if any is identified), and *user* (if different from the *property owner*) shall be asked whether they know of: (*1*) any pending, threatened, or past litigation relevant to *hazardous substances* or *petroleum products* in, on, or from the *property*; (*2*) any pending, threatened, or past administrative proceedings relevant to *hazardous substances* or *petroleum products* in, on or from the *property*; and (*3*) any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to *hazardous substances* or *petroleum products*.

10. Interviews With Local Government Officials

10.1 *Objective*—The objective of *interviews* with *local government officials* is to obtain information indicating *recognized environmental conditions* in connection with the *property*.

10.2 *Content*—Interviews with *local government officials* consist of questions to be asked in the manner and of persons as described in this section. The content of questions to be asked shall be decided in the discretion of the *environmental professional(s)* conducting the *Phase I Environmental Site Assessment*, provided that the questions shall generally be directed towards identifying *recognized environmental conditions* in connection with the *property*.

10.3 *Medium*—Questions to be asked may be asked in person or by telephone, in the discretion of the *environmental professional*.

10.4 *Timing*—It is in the discretion of the *environmental professional* whether to ask questions before or after the *site visit* described in Section 8, or in some combination thereof.

10.5 *Who Should Be Interviewed:*

10.5.1 *Local Agency Officials*—A reasonable attempt shall be made to interview at least one staff member of any one of the following types of local government agencies:

10.5.1.1 Local fire department that serves the *property*,

10.5.1.2 Local health agency or local/regional office of state health agency serving the area in which the *property* is located, or

10.5.1.3 Local agency or local/regional office of state agency having jurisdiction over hazardous waste disposal or other environmental matters in the area in which the *property* is located.

10.6 *Prior Assessment Usage*—Persons interviewed as

part of a prior *Phase I Environmental Site Assessment* consistent with this practice do not need to be questioned again about the content of answers they provided at that time. However, they should be questioned about any new information learned since that time, or others should be questioned about conditions since the prior *Phase I Environmental Site Assessment* consistent with this practice.

10.7 *Quality of Answers*—The person(s) interviewed should be asked to be as specific as reasonably feasible in answering questions. The person(s) interviewed should be asked to answer in good faith and to the extent of their knowledge.

10.8 *Incomplete Answers*—While the person conducting the *interview(s)* has an obligation to ask questions, in many instances the persons to whom the questions are addressed will have no obligation to answer them. If the person conducting the *interview(s)* asks questions but does not receive answers or receives partial answers, this section shall not thereby be deemed incomplete, provided that questions have been asked (or attempted to be asked) in person or by telephone and written records have been kept of the person to whom the questions were addressed and their responses.

11. Evaluation and Report Preparation

11.1 *Report Format*—The report of findings for the *Phase I Environmental Site Assessment* should generally follow the recommended report format attached as Appendix X2 unless otherwise required by the user.

11.2 *Documentation*—The report should include documentation (for example, references, key exhibits) to support the analysis, opinions, and conclusions found in the report. All sources, including those that revealed no findings, should be sufficiently documented to facilitate reconstruction of the research at a later date.

11.3 *Contents of Report*—The report shall include those matters required to be included in the report pursuant to various provisions of this practice. In addition, the report shall state whether the *user* reported to the *environmental professional* any information pursuant to the user's responsibilities described in Section 5 of this practice (for example, an *environmental lien* encumbering the *property* or any relevant specialized knowledge or experience of the user).

11.4 *Credentials*—The report shall name the *environmental professional(s)* involved in conducting the *Phase I Environmental Site Assessment*. One of two options shall be available to address qualifications of those persons involved in conducting the *Phase I Environmental Site Assessment*: (*1*) the report shall include a qualifications statement of the *environmental professional(s)* responsible for the *Phase I Environmental Site Assessment* and preparation of the report, and the qualifications statement shall include relevant individual and corporate qualifications; or (*2*) a written qualifications statement of the *environmental professional(s)* responsible for the *Phase I Environmental Site Assessment* and preparation of the report, including relevant individual and corporate qualifications, shall be delivered to the *user*.

11.5 *Opinion*—All evidence of recognized environmental conditions shall be described in full. The report shall include the *environmental professional's* opinion of the impact of *recognized environmental conditions* in connection with the *property*.

11.6 *Findings and Conclusions*—The report shall have a findings and conclusions section that states one of the following:

11.6.1 "We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E 1527 of [insert address or legal description], the *property*. Any exceptions to, or deletions from, this practice are described in Section [ ] of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property," or

11.6.2 "We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E 1527 of [insert address or legal description], the property. Any exceptions to, or deletions from, this practice are described in Section [ ] of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the *property* except for the following: (list)."

11.7 *Deviations*—All deletions and deviations from this practice (if any) shall be listed individually and in detail and all additions should be listed.

11.8 *Signature*—The environmental professional(s) responsible for the *Phase I Environmental Site Assessment* shall sign the report.

11.9 *Additional Services*—Any additional services contracted for between the user and the environmental professional(s), including a broader scope of assessment, more detailed conclusions, liability/risk evaluations, recommendation for Phase II testing, remediation techniques, etc., are beyond the scope of this practice, and should only be included in the report if so specified in the terms of engagement between the user and the *environmental professional*.

12. Non-Scope Considerations

12.1 *General:*

12.1.1 *Additional Issues*—There may be environmental issues or conditions at a property that parties may wish to assess in connection with *commercial real estate* that are outside the scope of this practice (the non-scope considerations). As noted by the legal analysis in Appendix X1 of this practice, some substances may be present on a property in quantities and under conditions that may lead to contamination of the property or of nearby properties but are not included in CERCLA's definition of hazardous substances (42 USC § 9601(14)) or do not otherwise present potential CERCLA liability. In any case, they are beyond the scope of this practice.

12.1.2 *Outside Standard Practices*—Whether or not a *user* elects to inquire into non-scope considerations in connection with this practice or any other environmental site assessment, no assessment of such non-scope considerations is required for appropriate inquiry as defined by this practice.

12.1.3 *Other Standards*—There may be standards or protocols for assessment of potential hazards and conditions associated with non-scope conditions developed by governmental entities, professional organizations, or other private entities.

12.1.4 *List of Additional Issues*—Following are several non-scope considerations that persons may want to assess in connection with commercial real estate. No implication is

intended as to the relative importance of inquiry into such non-scope considerations, and this list of non-scope considerations is not intended to be all-inclusive:

12.1.4.1 Asbestos-Containing Materials,

12.1.4.2 Radon,

12.1.4.3 Lead-Based Paint,

12.1.4.4 Lead in Drinking Water, and

12.1.4.5 Wetlands.

APPENDIXES

(Nonmandatory Information)

X1. LEGAL BACKGROUND TO FEDERAL LAW AND THE PRACTICES ON ENVIRONMENTAL ASSESSMENTS IN COMMERCIAL REAL ESTATE TRANSACTIONS

INTRODUCTION

The legal section of Subcommittee E50.02 on Environmental Assessments In Commercial Real Estate Transactions provides the following background to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended including amended by the Superfund Amendments and Reauthorization Act (SARA), 42 USC § 9601 *et seq.* The background to CERCLA, commonly known as the Superfund law, outlines the potential liability for the cleanup of hazardous substances, available defenses to such liability, appropriate inquiry under Superfund, statutory definition of hazardous substances, petroleum products and petroleum exclusion to CERCLA, and reasons why certain environmental-hazards are excluded from the scope of Superfund and this practice and Practice E 1528.

There are several elements of Superfund liability and the commonly termed "innocent purchaser" defense, that arises out of the statutory third-party defense, that may impact on the development and understanding of this practice and Practice E 1528.

X1.1 *Superfund Liability:*

X1.1.1 All of the following elements of liability under Superfund must be established by a plaintiff before a defendant will be held liable under superfund for a *government's* response costs:[7]

X1.1.1.1 The site is a facility, as defined at § 9601(9),

X1.1.1.2 A release or threatened release of a hazardous substance from the site occurred (release is defined at § 9601(22) as *any* amount of any hazardous substance; "hazardous substance" is defined at § 9601(14) (see statutory definition of "hazardous substance"),

X1.1.1.3 A release or threatened release caused the plaintiff to incur response costs. Response costs are defined at § 9601(25) to mean costs related to both removal actions (§ 9601(23)) and remedial actions (§ 9601(24)), and

X1.1.1.4 Defendants fall within at least one of the four classes of responsible parties.[8]

X1.1.2 In order to recover response costs, a government plaintiff must prove that the costs were not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan (commonly referred to as the National Contingency Plan or NCP), 40 CFR § 300.[9] A private plaintiff must prove its costs were necessary costs of response and that the response action was consistent with the NCP. 42 USC § 9607 (a).[10]

X1.1.3 If there is a release or threatened release of hazardous substances on a site, private parties, even if they are not PRPs, may decide to incur response costs and seek recovery from other private parties, and PRPs may seek contribution from other PRPs.

X1.1.4 There is an important difference between government's burden to show that its response costs are "not inconsistent with the NCP" and the burden a private party bears to show that its response costs are "consistent with the NCP". See § 9607 (a)(4)(A) and (B). Courts have interpreted this statutory difference to give the government a rebuttable presumption that its response costs are consistent with the

[7] 42 USC §9607(a). (All statutory references are to Title 42 of the United States Code, unless otherwise specified.) See *United States versus Aceto Agricultural Chemicals Corp.*, 872 F.2d 1373 (8th Cir. 1989). Private plaintiffs, as well as the government, may seek response costs under Superfund from defendants. While many users of these ASTM practices or other private parties may think in terms of how to defend against Superfund liability, they should recognize that they may decide to conduct cleanup actions and seek response costs from other parties.

[8] The four classes of potentially responsible parties (PRPs) are listed as § 9607(a) as follows:

(*1*) Owner and operator of a facility (See § 9601 (20)(A): the term "owner or operator" does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect his security interest in the facility. In *re: Bergsoe Metal Corporation*, 910 F.2d 668 (9th Cir. Aug. 9, 1990); *Guidice versus BFG Electroplating and Manufacturing Co.*, 732 F.Supp. 556 (W.D.Pa. 1989); *United States v. Mirable*, 23 ERC 1511 (E.D.Pa. 1985). But see *United States versus Fleet Factors Corp.*, 901 F.2d 1550 (11th Cir. 1990); *United States versus Maryland Bank and Trust Co.*, 632 F. Supp. 573 (D. Md. 1986). For clarification of the security interest exclusion, see EPA's rule on lender liability under CERCLA, 57 Federal Register 18344 (April 29, 1992),

(*2*) Any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of,

(*3*) Any person who by contract, agreement, or otherwise arranged for disposal or treatment or transport of hazardous substances, and

(*4*) Any person who accepts hazardous substances for transport to a facility selected by such person.

[9] The National Contingency Plan is the federal government's blueprint on how hazardous substances are to be cleaned up pursuant to CERCLA.

[10] See *Dedham Water Co. versus Cumberland Farms Dairy, Inc.*, 889 F.2d 1146 (1st Cir. 1989); other cases cited at ABA, *Natural Resources, Energy, and Environmental Law: 1989 The Year In Review*, p. 215, Note 155.

NCP, whereas a private party who undertakes response costs and seeks recovery from responsible parties bears the burden of proving its response was consistent with the NCP.[11] The EPA takes the position that a private party who undertakes a response action must be only in "substantial compliance", rather than strict technical compliance, with the NCP, as long as a CERCLA-quality cleanup is achieved. The NCP requirements for a private party response-action are set forth at 40 CFR § 300.700.

X1.2 *Defenses to Liability:*

X1.2.1 Assuming all the elements of liability exist, a party may avoid liability only by meeting one of the defenses listed in § 9607(b). These listed defenses are exclusive of all others.[12] Section 9607(b) states (*emphasis added*):

> "There shall be no liability under subsection (a) for a person otherwise liable who can establish by a preponderance of the evidence [the lowest evidentiary standard available, meaning more probable than not] that the release or threat of release of a hazardous substance and the damages resulting therefrom were *caused solely by*—
> 1) an act of God;
> 2) an act of war;
> 3) *an act or omission of a third party other* than an employee or agent of the defendant, or *than one whose act or omission occurs in connection with a contractual relationship* [see the definition of "contractual relationship" in X1.2.2], existing directly or indirectly, with the defendant . . ., if the defendant establishes by a preponderance of the evidence that (a) he exercised due care with respect to the hazardous substance concerned . . ., and (b) he took precautions against foreseeable acts or omissions of any such third party and the consequences that could foreseeably result from such actions or omissions."

X1.2.2 Under § 9601(35)(A), a contractual relationship "includes, but is not limited to, land contracts, deeds, or other instruments transferring title or possession . . .". These contractual relationships with third parties eliminate the defense to liability unless the defendant is an innocent purchaser. Or as stated by the statute at § 9601(35)(A)(emphasis added), a contractual relationship with the third party defeats the defense.

> "unless the real property on which the facility is located was acquired by the defendant after disposal or placement of the hazardous substance . . . and one or more of the following circumstances is also established by the defendant by a preponderance of the evidence:
> (i) At the time the defendant acquired the facility the defendant *did not know and had no reason to know* that any hazardous substance which is the subject of the release or threatened release was disposed of on, in, or at the facility.
> (ii) The defendant is the government . . .
> (iii) The defendant acquired the facility by inheritance or bequest."

X1.2.3 Therefore, the so-called innocent purchaser defense arises out of the third-party defense of § 9607(b)(3). Restated, this defense to Superfund liability is available only if the defendant shows the following:

X1.2.3.1 The release or threat of release was caused solely by a third party,

X1.2.3.2 The third party is not an employee or agent of the defendant,

X1.2.3.3 The acts or omissions of the third party did not occur in connection with a direct or indirect contractual relationship to the defendant, or if there was a contractual relationship, the defendant acquired the property after disposal or placement of the hazardous substance, and at the time the defendant acquired the facility the defendant *did not know and had no reason to know* that any hazardous substance that is the subject of the release or threatened release was disposed of on, in, or at the facility, and

X1.2.3.4 The defendant exercised due care with respect to the hazardous substances and took precautions against foreseeable acts or omissions of the third party.

X1.2.4 The statute then states at § 9601(35)(B) (*emphasis added*):

> "To establish that the defendant had no reason to know, as provided [above], *the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice* in an effort to minimize liability. . . . [T]he court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection."

X1.3 *Appropriate Inquiry in Commercial Real Estate Transactions:*

X1.3.1 One of the major questions that parties to commercial real estate transactions face when considering their potential Superfund liability is, "What level of inquiry into the previous ownership and uses of the property is appropriate to establish the innocent purchaser defense to Superfund liability?" These practices are structured to articulate the level of inquiry under Superfund that is appropriate for different situations.

X1.3.2 *The Appropriate Level of Inquiry:*

X1.3.2.1 The level of environmental inquiry that is appropriate under Superfund cannot be the same for every property or every party to a real estate transaction. The level of inquiry, in fact, will change depending on the particular property or party involved in a transaction. The statutory language, Congressional history, and common sense support this conclusion.

X1.3.2.2 First, it must be noted that little case law exists to serve as guidance about the minimum level of inquiry that will be deemed appropriate for the innocent purchaser defense. See, for example, *United States versus Serafini*, 706 F. Supp. 346 (M.D. Pa. 1988), and 1990 U.S. Dist. LEXIS 18466 (M.D. Pa. 1990) (By entertaining disputed facts as to the custom and practice of viewing land prior to purchase, the court implied that appropriate inquiry necessarily varies on a site-by-site basis); *United States versus Pacific Hide and Fur Depot, Inc.*, 716 F. Supp. 1341 (D. Idaho 1989) (No

[11] *Amland Properties Corp. versus Aluminum Co. of America*, 711 F. Supp. 784, 794 (D. N.J. 1989); *Artesian Water Co. versus New Castle County*, 659 F. Supp. 1269, 1291 (D. Del. 1987); *United States versus Northeastern Pharmaceutical and Chemical Co.*, 579 F. Supp. 823 (W.D. Mo. 1984), *aff'd in part, rev'd on other grounds*, 810 F.2d 726 (8th Cir. 1986).

[12] *United States versus Aceto Agricultural Chemicals Corp.*, 872 F.2d 1373 (8th Cir. 1989). But see *United States versus Marisol, Inc.*, 725 F. Supp. 833 (M.D. Pa. 1989) (equitable defenses under CERCLA may be available after the development of a factual record).

inquiry was required by those who received an ownership interest in property via corporate stock transfer and warranty deed under the facts of this case); *International Clinical Laboratories, Inc. versus Stevens*, 30 ERC 2066, 20 ELR 20,560 (E.D.N.Y. 1990). (Despite a long history of toxic wastewater disposal and presence of the site on the state's hazardous waste disposal site list, the purchaser established the innocent purchaser defense since there were no visible environmental problems at the site, the defendant had no knowledge of environmental problems at the site and the purchase price did not reflect a reduction on account of the problem.)

X1.3.2.3 While the statute does not specifically distinguish certain types of properties and uses from others, or certain types of parties from others, it does list certain factors courts should consider in determining whether one's inquiry under the circumstances is appropriate. The statute, as explained in X1.2, requires a court to consider a party's specialized knowledge or experience. The statute further mandates a court to consider what is "*reasonably* ascertainable information about the property", what contamination is *obviously* present, and the *party's* "ability to detect such contamination". The very use of terms such as "appropriate" and "reasonably", and the use of "specialized knowledge and experience" and "ability" in conjunction with the specific person attempting to utilize the defense signifies that Congress did not intend the appropriateness of the inquiry be judged by a bright line standard. If it so intended, Congress would have stated, but did not, that the same inquiry should be made in every case.

X1.3.2.4 What is reasonable and obvious to one party may not be so to other parties, and ability, by necessity, varies among all parties. The statute, therefore, recognizes that different properties and parties must be treated differently. That is, different parties may conduct different levels of inquiry appropriate to their circumstances.

X1.3.2.5 The statutory standard of "appropriate inquiry" suggests the level of inquiry will depend on the circumstances and the underlying facts. Since the facts are almost always different, the level of inquiry must change with them. The legislative history on this particular issue demonstrates that Congress intended that the level of inquiry changes with the type of property and party:[13]

> The duty to inquire under this provision shall be judged as of the time of acquisition. Defendants shall be held to a higher standard as public awareness of the hazards associated with hazardous releases has grown, as reflected by this Act, the 1980 Act [CERCLA] and other Federal and State statutes.
>
> Moreover, good commercial or customary practice with respect to inquiry in an effort to minimize liability shall mean that a reasonable inquiry must have been made in all circumstances, in light of best business and land transfer principles.
>
> Those engaged in commercial transactions should, however, be held to a higher standard than those who are engaged in private residential transactions.

X1.3.2.6 Because few cases address the standard of inquiry in the innocent purchaser defense and the legislative history describing Congressional intent is sparse, common sense is a useful guide in interpreting statutory language. If CERCLA mandated that the level of inquiry be the same for every property or potential defendant, then a lay consumer (renter or buyer) of a home, a purchaser of a small environmentally benign business, and a multinational corporate buyer of an industrial complex would have to conduct the same environmental site assessment (ESA) of the different properties in question. Additionally, the statute makes no mention of a Phase I ESA or any other specific type of inquiry one is to conduct in order for the inquiry to be deemed appropriate. If all inquires had to be at the same level to be "appropriate", it would be illogical to stop at a Phase I ESA since some commercial or industrial properties routinely undergo, in the exercise of good commercial and customary practices, intrusive sampling (typically a Phase II ESA activity). Therefore, since routinely some properties undergo sampling, an inflexible standard would require sampling of all properties, no matter what its use. This could not have been the intended result of SARA.

X1.3.3 *The Minimum Inquiries to Satisfy All Appropriate Inquiry:*

X1.3.3.1 Recognizing that inquiry changes with the underlying circumstances, the next question concerns that level of inquiry, if any, that Superfund requires to utilize the innocent landowner defense.

X1.3.3.2 As noted above, in some real estate transactions a Phase II ESA is routinely conducted. A Phase I ESA is conducted in these transactions only as a necessary prerequisite to outline the scope of the Phase II ESA. A Phase II ESA typically involves taking soil, water, and air samples to determine their contaminant content or verify that no contaminants are present or likely present. Note, however, that this simplistic outline of the Phase II ESA is misleading since the party can always dig down one foot deeper, take one more sample, or conduct one more test. The problem of how much inquiry is conducted, or at what level a party should begin, involves proving a negative, that is, that no contamination is present.[14] Since, according to the statute, inquiries should be judged by the circumstances existing at the time of acquisition, then there could be some properties and parties to real estate transactions where it may be appropriate to begin the inquiry with an intrusive Phase II ESA in order to invoke the innocent purchaser defense to liability.

X1.3.3.3 At the other extreme, the minimum level of inquiry that a party would be expected to conduct is found by looking at the least environmentally obtrusive class of

[13] H.R. Rep. No. 962, 99th Cong., 2d Sess. 187 (1986), *reprinted at* 1986 U.S. Code Cong. and Admin. News 3276, 3280.

[14] The inability to prove a negative creates a dilemma for the potential defendant. If the party's inquiry discovers contamination, then under the statute the party will not be able to avail itself of the innocent purchaser defense. If the inquiry does not discover contamination, EPA or another private party can argue in a response action that the inquiry was not "appropriate" and, therefore, the defendant can have no defense. This dilemma is explicitly recognized by the Subcommittee E50.02 as beyond any reasonable interpretation of Congressional intent. The scope of the E50.02 Standard Practices resolves the party's dilemma in the only reasonable way by stating: "It should not be concluded or assumed that the inquiry was not appropriate inquiry merely because the inquiry did not identify existing recognized environmental conditions in connection with a property. Environmental site assessments must be evaluated based on the reasonableness of the judgments made at the time and under the circumstances in which they were made." See 4.5.4.

property and party from a CERCLA perspective. This transaction likely involves the lay buyer of a home or the renter of an apartment. Assuming these parties meet the other prerequisites for the innocent purchaser defense, what level of environmental inquiry must they conduct to avoid Superfund liability? While there are no recorded court cases on this issue, the answer is probably none, unless a particular residential purchaser or renter has some specialized knowledge about or experience with the property in question that would lead a court to conclude that some questions should have been asked. Beyond these rare situations, it is highly unlikely that Congress intended to saddle housing consumers with the burden of investigating or cleaning up contaminated sites. In fact, EPA has issued a statement of enforcement policy to the effect that it will not generally pursue owners of single family residences pursuant to CERCLA.[15] Therefore, for some properties and parties to real estate transactions, it is appropriate to conduct no environmental inquiry in order to meet one's innocent purchaser defense to liability.

X1.3.3.4 The minimum level of appropriate inquiry under Superfund, therefore, ranges from no specialized inquiry to conducting an intrusive Phase II ESA. In order to satisfy these practices, to do no specialized inquiry, such as the Transaction Screen or Phase I ESA, is not enough for commercial real estate transactions. Under current commercial and customary practice and in light of best business and land transfer principles, however, no environmental site assessments are conducted in many real estate transactions, particularly those involving smaller properties, vacant land, or transactions of low monetary value. This practice and Practice E 1528 and the minimum level of inquiry under these practices, actually raises the average level of inquiry that should be performed where the parties want to come within the protection of the innocent landowner defense.

X1.3.3.5 The burden of proof is on the defendant to sustain by a preponderance of the evidence, the innocent purchaser defense. This is the least onerous burden of proof available to a party in litigation. The defendant must show only that the evidence offered to support the level of inquiry that was taken at the time of acquisition is of greater weight or more convincing than the evidence offered in opposition to it. In other words, the evidence on the inquiry issue taken as a whole shows that the fact sought to be proved is more probable than not. There may be technical or business judgments on whether the inquiry conducted or any other fact in a particular case is sufficient to meet the needs or concerns of a party to the real estate transaction. The bottom line, however, is that the judgment on whether the specific facts of a case, in light of statutory language, are sufficient to produce liability or a viable defense to liability is a legal one and such judgments constitute the practice of law.

X1.3.3.6 Practice E 1528 is designed as the minimum level of inquiry to satisfy the practice from which a party to a commercial real estate transaction should proceed, recognizing that some parties to some commercial real estate transactions may wish to proceed by beginning with a Phase I or a Phase II ESA.

[15] EPA, *Policy Towards Owners of Residential Property at Superfund Sites*, OSWER Directive No. 9834.6, July 3, 1991.

X1.4 *Statutory Definition of Hazardous Substance:*

X1.4.1 The statute at 42 USC § 9601(14)(A – F) defines hazardous substance by referring to five other statutes as well as to Superfund's own § 9602. The following is a description of the relevant portions of the other statutes and § 9602 of Superfund:

42 USC § 9601(14)(A): "[A]ny substance designated pursuant to section 1321(b)(2)(A) of Title 33." Title 33 USC § 1321 lies within the Clean Water Act and refers to, among other things, hazardous substance liability. 33 USC § 1321(b)(2)(A) states that the EPA shall develop, "as may be appropriate, regulations designating as hazardous substances, other than oil as defined in this section, such elements and compounds which, when discharged in any quantity into" the navigable waters of the United States . . ., present an imminent and substantial danger to the public . . . health or welfare, including, but not limited to, fish, shellfish, wildlife, shorelines, and beaches."

42 USC § 9601(14)(B): "[A]ny element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title." Section 9602 gives EPA the authority to designate as a hazardous substance "such elements, compounds, mixtures, solutions, and substances which, when released into the environment may present substantial danger to the public health or welfare or the environment. . . ."

42 USC § 9601(14)(C): "[A]ny hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 USCA § 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 USCA § 6901 *et seq.*] has been suspended by Act of Congress)." The Solid Waste Disposal Act of 1980 amended the Resource Conservation and Recovery Act (RCRA). 42 USCA § 6921 of RCRA provides authority to the EPA to develop criteria for identifying characteristics of hazardous waste and for listing particular hazardous wastes within the meaning of 42 USCA § 6903(5) of RCRA. RCRA, § 6903(5), defines hazardous waste to mean

"a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—

(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

For the identification and listing of hazardous wastes under RCRA, see 40 CFR §§ 261.1 *et seq.*

42 USC § 9601(14)(D): "[A]ny toxic pollutant listed under Section 1317(a) of Title 33." Section 1317(a) of Title 33 refers to toxic and pretreatment effluent standards under the Clean Water Act. The EPA is charged in this section with publishing and revising from time to time a list of toxic pollutants, taking "into account toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms, and the nature and extent of the effect of the toxic pollutant on such organisms." Each toxic pollutant listed according to this section shall be subject to effluent limitations. For toxic pollutant effluent standards, see 40 CFR §§ 129.1 *et seq.*

42 USC § 9601(14)(E): "[A]ny hazardous air pollutant listed under Section 112 of the Clean Air Act [42 USCA § 7412]." Section 7412 of Title 42 deals with national emission standards for hazardous air pollutants. The EPA is charged here with publishing and revising from time to time "a list which includes each hazardous air pollutant for which [it] intends to establish an

emission standard under this section." The term "hazardous air pollutant" means an air pollutant that in EPA's judgment "causes, or contributes to, air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness." For emission standards for hazardous pollutants, see 40 CFR § 61.01 *et seq.*

42 USC § 9601(14)(F): "[A]ny imminently hazardous chemical substance or mixture with respect to which the [EPA] has taken action pursuant to Section 2606 of Title 15." Section 2606 of Title 15 deals with imminent hazards under the Toxic Substances Control Act (TSCA). The EPA is authorized under 15 USC § 2606 to seize an imminently hazardous chemical substance or mixture or seek other relief, such as requiring notice to users of the chemical substance or public notice of the risk associated with the substance or mixture. The term " 'imminently hazardous chemical substance or mixture' means a chemical substance or mixture which presents an imminent and unreasonable risk of serious or widespread injury to health or the environment."

X1.4.2 After Subsections A–F, outlined above, the Superfund definition of "hazardous substance" in § 9601(14) then goes on to state:

"The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

X1.4.3 The EPA has collected a list of "those substances in the statutes referred to in Section 101(14) of the Act [42 USC § 9601(14)]" 40 CFR § 302.1 (1989) ("List of Hazardous Substances And Reportable Quantities," 40 CFR Part 302). This list changes with notices in the Federal Register. Also, any time a new hazardous waste is listed, the waste automatically becomes a hazardous substance.

X1.5 *Petroleum Products:*

X1.5.1 Under the petroleum exclusion of CERCLA (42 USC § 9601(14)), petroleum and crude oil have been explicitly excluded from the definition of hazardous substances under CERCLA. Nevertheless, petroleum products are included within the scope of both practices because they are of concern in many commercial real estate transactions and current custom and usage is to include an inquiry into the presence of petroleum products in an environmental site assessment. Inclusion of petroleum products within the scope of the practices is not based upon the applicability, if any, of CERCLA to petroleum products.

X1.5.2 One reason to include petroleum products within the scope of the practices is because to do so reflects custom and usage: when environmental assessments are conducted in connection with commercial real estate transactions, they customarily include an assessment of the presence or likely presence of petroleum products under conditions that may lead to contamination. For example, environmental assessments ordinarily seek to assess whether there may be underground or above-ground storage tanks that may be leaking, whether those tanks contain petroleum products or some other product.

X1.5.3 In addition, although CERCLA may exclude petroleum products, other laws require cleanup of releases or spills of petroleum products. For example, petroleum products sometimes (for example, when they cannot be reclaimed from soil) become hazardous wastes subject to RCRA Subtitle C (42 USC § 6921 *et seq.*), must be cleaned up if released from underground storage tanks pursuant to RCRA Subtitle I (42 USC § 6991 *et seq.*), must be cleaned up pursuant to the Oil Pollution Act of 1990 (33 USC § 1321 *et seq.*), and must be cleaned up if released into the navigable waters of the United States pursuant to the Clean Water Act (33 USC § 1251 *et seq.*).

X1.5.4 Moreover, case law and EPA interpretations of the petroleum exclusion require an analysis of the facts of each case to determine whether a particular petroleum product is included in CERCLA's petroleum exclusion. The exclusion has been broadly interpreted to exclude gasoline and leaded gasoline from CERCLA's definition of hazardous substances regardless of the fact that gasoline and leaded gasoline contain certain indigenous components and additives which have themselves been designated as hazardous pursuant to CERCLA. See *Wilshire Westwood Associates versus Atlantic Richfield Corporation*, 881 F.2d 801 (9th Cir. 1989). The interpretation was narrowed when a judicial distinction was made between petroleum fractions produced by distillation processes and waste products resulting from contaminated tank scale. See *United States versus Western Processing Co.*, 761 F.Supp. 713 (W.D. Wash. 1991). Another decision narrowly interpreted CERCLA's petroleum exclusion to be inapplicable to oil-related wastes containing hazardous substances because the primary purpose of the exclusion is to remove "spills or other releases strictly of oil" from the scope of CERCLA response and liability (not releases of hazardous substances mixed with oil). See *City of New York versus Exxon Corporation*, 744 F. Supp. 474 (S.D.N.Y. 1990). For additional discussion, see EPA Memorandum entitled, "The Petroleum Exclusion Under the Comprehensive Environmental Response Compensation and Liability Act," issued by EPA's General Counsel, Francis S. Blake, July 31, 1987.

X1.6 *Exclusion of Certain Hazards From Superfund:*

X1.6.1 The information that follows is provided to explain why these potential environmental hazards are not covered by Superfund's appropriate inquiry responsibilities:

X1.6.2 As a preliminary matter, it should be noted that an environmental site assessment that does not address substances excluded from CERCLA (whether those substances are excluded because they are petroleum products or by virtue of other characteristics) but that otherwise constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" should nevertheless entitle the user to the innocent purchaser defense, assuming that other requirements of the defense are met.

X1.6.3 *Radon:*

X1.6.3.1 A case discussing Superfund and radon is *Amoco Oil Company versus Borden, Inc.*, 889 F.2d 664 (5th Cir. 1989). This case dealt with a private cost recovery action by the buyer of a site against the seller for response costs relating to radiation from phosphogypsum wastes left on the site. Radon emanated from these radioactive wastes. The case points out that the "EPA has designated radionuclides as hazardous substances under § 9602(a) of CERCLA.... Additionally, the ... EPA under § 112 of the Clean Air Act ...

list radionuclides as a hazardous air pollutant. Radon and its daughter products are considered radionuclides, which are defined as 'any nuclide that emits radiation.' " Therefore, radon is a CERCLA hazardous substance. Also, when discussing what constitutes a release of a hazardous substance under the statute, the statute is plain that there is no quantitative requirement and that a release, broadly defined at 42 USC § 9601(22), *of any* amount constitutes a CERCLA release.

X1.6.3.2 Liability under Superfund depends on several factors, as noted in X1.1. Only one of four factors is the release or threatened release of a hazardous substance. The other three factors are (*1*) the site is a facility, (*2*) the defendant falls within at least one of four classes of potentially responsible parties (PRPs), and (*3*) the release or threatened release *caused* the plaintiff (that can be the government or another private party) to incur response costs. Further, response costs must not be inconsistent with the National Contingency Plan (NCP), *and must not be limited by § 9604(a)(3)*. And, of course, there is no need to raise the innocent purchaser defense and its appropriate inquiry requirements unless the elements of liability will be met.

X1.6.3.3 Where radon from any source occurs in a building, three of the liability elements under CERCLA are met. There is a release of a hazardous substance, the building is a facility, and we can assume the defendant is a PRP. However, under 42 USC § 9604(a)(3)(A), "[r]emedial actions taken in response to hazardous substances as they occur naturally are specifically excluded from the NCP and are therefore not recoverable." *Amoco Oil Company versus Borden, Inc., 889 F.2d at 570. The statute is plain.*[16]

"(3) Limitations on response

The President shall not provide for a removal or remedial action under this section in response to a release or threat of release—

(A) *of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found;*

(B) from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures;[17] or

(C) into public or private drinking water supplies due to deterioration of the system through ordinary use.[18]

(4) Exception to limitations

Notwithstanding paragraph (3) of this subsection, to the extent authorized by this section, the President may respond to any release or threat of release if in the President's discretion, it constitutes a public health or environmental emergency and no other person with the authority and capability to respond to the emergency will do so in a timely manner."

X1.6.3.4 Therefore, no liability under CERCLA attaches for naturally occurring radon. If a party to a real estate transaction wants to look for radon within a building, no amount of radon investigation will have any bearing on one's innocent purchaser defense under Superfund. Investigation of naturally occurring radon would be included, if at all, in the portion of the practice that deals with non-scope issues.

X1.6.4 *Asbestos:*

X1.6.4.1 The analysis of asbestos is similar to that involving radon. Before considering appropriate inquiry responsibilities, the four elements of CERCLA liability must be satisfied. Once again, as with radon, they are not met.

X1.6.4.2 Section 9604(a)(3)(B) of CERCLA prohibits response actions involving a release or threat of release "from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures." There are a number of cases dealing with asbestos that interpret this statutory language. One such case is *First United Methodist Church of Hyattsville versus United States Gypsum Co.* that cites to other relevant cases.

X1.6.4.3 In *First United* the church brought a private cost recovery action against the manufacturer of asbestos-containing acoustical plaster. In holding that the action was barred by a state statute of repose (a certain time allowed by statute for bringing litigation) and that CERCLA did not preempt the state statute of repose, the court stated that § 9604(a)(3)(B) of CERCLA "represents much more than a procedural limitation on the President's authority; *it is* a substantive limitation of the breadth of CERCLA itself."[19] Therefore, the limitations of § 9604(a)(3) apply to private parties as well.

X1.6.4.4 Citing to the legislative history, the *First United* court concluded, "[i]n view of this clear expression of Congressional intent, we wil[l] not expand CERCLA to encompass asbestos-removal actions." The court further explained:[20]

"In closing, we note that this interpretation of CERCLA fully comports with the most fundamental guide to statutory construction—common sense. To extend CERCLA's strict liability scheme to all past and present owners of buildings containing asbestos as well as to all persons who manufactured, transported, and installed asbestos products into buildings, would be to shift literally billions of dollars of removal cost liability based on nothing more than an improvident interpretation of a statute that Congress never intended to apply in this context. [FN12] . . . Certainly, if Congress had intended for CERCLA to address the monumental asbestos problem, it would have said so more directly when it passed SARA. . . .

FN12—It is for this reason, that Congress simply did not intend for CERCLA to remedy the asbestos-removal problem, that we decline to follow the reasoning of *Prudential, Knox and Covalt* in rejecting First United's preemption argument. Instead of recognizing the fact that CERCLA is out of context in this situation, these courts rejected similar attempts to invoke the statute by construing CERCLA's key terms in a way to exclude asbestos-removal actions. *Covalt*, 860 F.2d [1434] at 1438-39 (defining "environment" to exclude the interior of a workplace); *Knox*, 690 F. Supp at 756-57 (defining "release" in terms of "spills" or "disposal"); *Prudential*,

[16] 42 USC § 9604(a)(3) and (4) (*emphasis added*).

[17] This provision has implications for asbestos and lead-based paint. See X1.6.4 and X1.6.5.

[18] This provision has implications for lead from lead pipes and solder. See X1.6.5.

[19] One such case is *First United Methodist Church of Hyattsville versus United States Gypsum Co.*, 882 F.2d 862 (4th Cir. 1989), that cites to other relevant cases.

[20] The same at 869; See also *3550 Stevens Creek Associates versus Barclays Bank of California*, 915 F.2d 1355 (9th Cir. 1990).

[711 F. Supp 1244] at 1254-55 (defining "disposal" to exclude the sale of a product for consumer use). We find this analysis unsatisfactory because it runs the risk of unnecessarily restricting the scope of CERCLA merely to dispose of claims that the statute was never intended to encompass in the first place. It is far better to simply acknowledge the inapplicability of CERCLA to asbestos-removal claims than to restrict its operative terms."

X1.6.4.5 Since asbestos that is a part of the structure of, and results in exposure within, residential buildings or business or community structures is excluded from CERCLA liability, it should not be investigated pursuant to a party's innocent purchaser appropriate inquiry requirements. Like naturally occurring radon, investigation of asbestos-containing materials that are part of the structure of buildings should be included, if at all, in the portion of this practice that deals with non-scope issues. Note, however, if asbestos is disposed of on a site and, therefore, is no longer part of the structure of a building, the cleanup of the disposed asbestos is subject to Superfund response actions. Likewise, if a building is sold with the knowledge that it will be demolished, one court ruled that the sale constitutes a disposal falling under CERCLA's liability provisions.[21]

X1.6.5 *Lead in Drinking Water and Lead-Based Paint*—These hazards can be evaluated in terms of the exclusions of 42 USC § 9604(a)(3)(B) and (C), in an analysis similar to the analysis applied above to radon and asbestos. While there is no reported case law on these environmental issues as they relate to Superfund, the statutory language seems clear that these environmental hazards are not encompassed by Superfund's appropriate inquiry responsibilities. Note, however, like asbestos, where there is a disposal of these substances on the site or in a facility, CERCLA liability may arise.

[21] *CP Holdings, Inc. versus Goldberg-Zoino & Associates, Inc.*, 769 F. Supp. 432 (D.N.H. 1991).

X2. RECOMMENDED TABLE OF CONTENTS AND REPORT FORMAT

X2.1 Summary
X2.2 Introduction
X2.2.1 Purpose
X2.2.2 Special Terms and Conditions
X2.2.3 Limitations and Exceptions of Assessment
X2.2.4 Limiting Conditions and Methodology Used
X2.3 Site Description
X2.3.1 Location and Legal Description
X2.3.2 Site and Vicinity Characteristics
X2.3.3 Descriptions of Structures, Roads, Other Improvements on the Site (including heating/cooling system, sewage disposal, source of potable water)
X2.3.4 Information (if any) Reported by User Regarding Environmental Liens or Specialized Knowledge or Experience (pursuant to Section 5.)
X2.3.5 Current Uses of the Property
X2.3.6 Past Uses of the Property (to the extent identified)
X2.3.7 Current and Past Uses of Adjoining Properties (to the extent identified)
X2.3.8 Site Rendering, Map, or Site Plan
X2.4 Records Review
X2.4.1 Standard Environmental Record Sources, Federal and State
X2.4.2 Physical Setting Source(s)
X2.4.3 Historical Use Information
X2.4.4 Additional Record Sources (if any)
X2.5 Information from Site Reconnaissance and Interviews
X2.5.1 Hazardous Substances in Connection with Identified Uses (including storage, handling, disposal)
X2.5.2 Hazardous Substance Containers and Unidentified Substance Containers (including storage, handling, disposal)
X2.5.3 Storage Tanks (including contents and assessment of leakage or potential for leakage)
X2.5.4 Indications of PCBs (including how contained and assessment of leakage or potential for leakage)
X2.5.5 Indications of Solid Waste Disposal
X2.5.6 Physical Setting Analysis, if migrating Hazardous Substances are an issue
X2.5.7 Any Other Conditions of Concern
X2.5.8 Site Plan (if available)
X2.6 Findings and Conclusions
X2.7 Signatures of Environmental Professionals
X2.8 Qualifications of Environmental Professionals Participating in Phase I Environmental Site Assessment
X2.9 Optional Appendices (for example):
X2.9.1 Other Maps, Figures, and Photographs
X2.9.2 Ownership/Historical Documentation
X2.9.3 Regulatory Documentation
X2.9.4 Interview Documentation
X2.9.5 Contract between User and Environmental Professional

The American Society for Testing and Materials takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, 100 Barr Harbor Drive, West Conshohocken, PA 19428.

EXHIBIT A

Contract for Sale of Commercial Real Estate

I.	Seller's name and address:	**Owner of Record**
II.	Purchaser's name and address:	**Roy Acquisition Corporation, an Illinois corporation, - or its nominee- 2900 S. 21st Avenue Broadview, Illinois 60153**
III.	Street address of the Real Estate:	**2424 Wisconsin Ave., Downers Grove, IL**
IV.	Purchase Price:	**$1,650,000.00**
V.	Earnest Money:	**$5,000.00 contemporaneously with delivery of this Contract, and $45,000.00 in the form of cash or check to be delivered within ten (10) days of Seller's execution hereof.**
VI.	Title Insurer:	**Chicago Title Insurance Company**
VII.	Mortgage Contingency: (a) amount: (b) Interest rate: (c) term:	 **$1,320,00.00** **9.0%** **20-year amortization with no more than a 3.00% loan point charge.**
VII.	Anticipated closing date:	**June 1, 1997; possession to be given at closing.**
IX.	Name and address of listing broker:	**Darwin Realty & Development Corp. 1125 Tower Lane Bensonville, IL 60106 (630) 766-3344**
X.	Date of Execution of this Contract:	**October 10, 1996**
XI.	Place of Execution of this Contract:	**Broadview, Illinois.**

Purchaser:

Roy Acquisition Corp., an Illinois corporation, as Nominee

By: [illegible]

Its: President

Seller:

2430 Wisconsin Co

By: Daniel H Stiehr

Its: Managing Partner

The undersigned Holder acknowledges receipt of **FIFTY THOUSAND AND NO/100 DOLLARS ($50,000.00)** as Earnest Money hereunder, and agrees to be bound by the provisions of this Contract, particularly section 2.02.

DARWIN REALTY & DEVELOPMENT CORP.

_____

_____

[Print Name]

Contract for Sale of Commercial Real Estate

By this Contract the parties hereto commit as follows:

Article 1. Property Being Sold

1.01 Property being Sold. Seller will sell to Purchaser and Purchaser will purchase from Seller, as provided in this Contract (a) the parcel of land ("Land") that is legally described in Schedule A, (b) all buildings and improvements (collectively, the "Building") situated on the Land, (c) any appurtenances (including but not limited to riparian rights) to the Land and Building, and (d) any right, title and interest of Seller in (i) the fixtures and equipment attached or appurtenant to the Building (specifically excluding movable office partitions, portable walls and and other personalty belonging to and removable by the current tenant pursuant to such tenant's lease with Seller) and (ii) any personal property described in Schedule F. The items described in sub-sections (a) through (d) are collectively referred to herein as the "Real Estate".

Article 2. Purchase Price, Earnest Money and Purchase Money Mortgage

2.01 Purchase Price. Purchaser will (at Closing and as described in section C-1 of the Summary Page hereof) pay the Purchase Price that is specified at item IV.

2.02 Earnest Money. The Earnest Money, which is specified at item V, will be paid as described in section C-1 and will be held by the party ("Holder") identified at Item IX for the benefit of Purchaser and Seller.

a. Holder will hold the Earnest Money cash in an interest-bearing bank account until Closing or earlier termination of the Contract and will pay over or apply the cash and deliver any other deposits in accordance with the Contract.

b. Use of deposited funds.

   i. If Closing occurs as scheduled, any cash that is so held will be paid by Holder to Seller, and any earnings thereon will be paid to Purchaser.

   ii. If Closing does not occur as scheduled, or otherwise as agreed by Purchaser and Seller:

      A. If a party directs Holder to deliver the Earnest Money, Holder will notify the other party of the direction. If Holder does not receive a written objection from the other party to the proposed delivery within ten (10) business days after Holder gave such notice, Holder is authorized to deliver the deposit. If Holder receives an objection within the ten-day period, Holder will continue to hold the deposit until otherwise directed by instructions from the parties or a final judgment of a court.

      B. Any earnings on the Earnest Money will be paid to Purchaser, and the party receiving the earnings will pay any income tax thereon.

c. Identification. Seller's and Purchaser's taxpayer identification numbers are specified in sections D-1 and D-2.

d. Succession. If Holder fails, refuses, or ceases to act, Purchaser and Seller will jointly select a successor.

Article 3. Purchaser's Mortgage Contingency

3.01 Application. If an amount is specified at item VII, Purchaser will (promptly after this Contract is signed) use best efforts to obtain a first mortgage on the Real Estate in that amount and on the terms specified in section D-3.

3.02 Alternate Financing. If, after Purchaser has submitted a true loan application and otherwise made every reasonable effort to procure a loan commitment, Purchaser is unable to obtain such commitment and gives written notice thereof to Seller by the time specified in or determined pursuant to section D-3-c, this Contract shall terminate and be null

and void and all earnest money (plus any interest earned thereon) shall be promptly refunded to Purchaser. If Seller, at Seller's option, notifies Purchaser within ten (10) days of Purchaser's notice, that Seller intends to procure for Purchaser such a commitment (on the same terms and conditions) within forty-five (45) days, then this Contract shall remain in full force and effect, provided Seller in fact procures such a commitment within such 45-day time period. To that end, Purchaser shall execute all documents necessary to a mortgage from Seller's lender.

3.03 A lender that makes any such loan is referred to herein as "Purchaser's Lender."

Article 4. **Title Insurance and Condition of Title**

4.01 Title Commitment. Promptly after the Execution Date Seller will apply for issuance by Title Insurer of a commitment for an owner's title insurance policy. Said title commitment will be obtained within fifteen (15) business days after the expriation of the time period set forth in section 5.03 hereof.

a. The commitment is (i) to be in the amount of the Purchase Price, (ii) to include a zoning endorsement that insures Purchaser that the existing structures on, and the present use of, the Real Estate do not violate any zoning laws, regulations and ordinances, (iii) to include extended coverage over general exceptions, and (iv) to cover title to the Real Estate on or after the Execution Date.

b. On receipt of the commitment Seller will promptly cause a copy of the commitment to be delivered to Purchaser's attorney. Seller will use best efforts to cause the commitment to conform to the condition of title specified in Section 4.02 by the later of (i) ten (10) days after Seller receives a copy of the commitment and (ii) ten (10) days prior to the scheduled date of Closing.

c. Seller will pay for the title insurance commitment and the resulting owner's title policy.

4.02 Condition of Title. Seller will use best efforts to convey, and Purchaser will accept if tendered, fee simple title to the Real Estate in accordance with the terms of this Contract, subject only to (a) the matters set forth in Schedule B ("Permitted Exceptions"), (b) matters that are insured against pursuant to section 14.04, and (c) any other matters as to which both (i) Title Insurer is willing to insure by endorsement and (ii) Purchaser's Lender, if any, will accept.

Article 5. **Inspection, Due Diligence and Termination**

5.01 Information Regarding the Premises. Within thirty (30) business days from the Date of Execution Seller will make available to Purchaser for inspection and copying any and all building plans and specifications.

5.02 Inspection of the Premises. Within thirty (30) business days after the Date of Execution, Purchaser(or its agents or, if requested by Purchaser, representatives of the Village of Downers Grove, Illinois) may, at Purchaser's sole cost and expense, inspect the physical condition, elements and components of the Premises and obtain soil tests and such current environmental audits (so-called "Phase I" or "Phase II" reports) of the Premises (at Seller's sole cost and expense) as required by Purchaser or Purchaser's Lender, necessary to qualify Purchaser an an "Innocent Purchaser" under the Illinois Environmental Protection Act, all subject to the rights of any tenants. Seller will use best efforts to obtain any necessary consents from tenants. Seller shall procure the Phase I report on Purchaser's behalf from carlson Engineering, which shall satisfy Seller's obligation hereunder. Phase II reorts shall be ordered only if so recommended by the Phase I report.

5.03 Purchaser's Election to Terminate. Purchaser may elect to terminate this Contract by notice to Seller at any time prior to fifteen (15) business days after expiration of the time period that is provided for by section 5.02, (a) the material that is described in section 5.01 has not been made available to Purchaser as called for by that section, (b) Purchaser has not been able to inspect the Premises and obtain soil tests and an environmental audit of the Premises, or (c) Purchaser is dissatisfied with any matters disclosed by such documents, inspection or tests. If Purchaser so elects to terminate this Contract, section 14.03 will apply.

5.04 Acceptance of the Premises. If Purchaser does not elect to terminate this Contract pursuant to section 5.03 and Purchaser is otherwise required to proceed hereunder, Seller will deliver (and Purchaser will accept) the Premises in substantially the same condition at closing as on the Date of Execution, except for ordinary wear and tear, and matters described in Articles 9 and 10, but Purchaser will have the benefit of any representations and warranties by Seller relating to the Premises.

Article 6. **Seller's Covenants**

Seller covenants that between the Date of Execution and Closing:

6.01 Service Contracts. Seller will not amend any Service Contract or enter into any new Service Contract unless the same is terminable without penalty by the then owner of the Premises on not more than thirty (30) days' notice. A "Service Contract" is (a) any service, maintenance, supply or management contract that relates to the Premises, and (b) any lease of equipment (such as laundry or vending machines) that is located, and furnished for use, in the Premises.

6.02 Insurance. Seller will maintain its present insurance in full force and effect (subject to any scheduled expiration thereof) until Closing.

6.03 Tax Proceedings. Seller will not withdraw, settle, or otherwise compromise any protest or reduction proceeding affecting real estate taxes assessed against the Real Estate for the tax year in which the Closing is to occur or any subsequent tax year without the prior consent of Purchaser, which consent will not be unreasonably delayed or withheld.

6.04 Access to Premises and Documents. Seller will allow Purchaser access to the Premises (subject to the rights of any tenants) and to the documents required to be delivered under this Contract on reasonable notice at reasonable times. Seller will make all Building files and records reasonably available to Purchaser for copying.

6.05 Building Inspection and Violations. Seller will advise Purchaser with respect to any and all building inspections, and Violation Notices, as required by Article 9.

Article 7. **Seller's Warranties**

Seller makes the following warranties to Purchaser as of the Date of Execution; the warranties are limited by any matters that Seller has disclosed to Purchaser in writing.

7.01 Seller's Interest and Authority. Title to the Premises is as stated in Schedule A. Seller has authority to enter into and perform this Contract.

7.02 Existing Mortgages. If the Real Estate is encumbered by one or more existing mortgages, no written notice has been received from the mortgagee thereunder asserting the existence of a default or breach thereunder that remains uncured.

7.03 Personal Property. Schedule F lists all items of personal property and fixtures that are included in the sale and such property is free of liens and encumbrances.

7.04 Assessed Valuation. Any assessed valuation and real estate taxes set forth in sections D-4 through D-6 are the assessed valuation of the Real Estate and the taxes paid or payable with respect to the Real Estate for the years indicated in such sections. Except as otherwise specified in section D-6, , there are no tax or assessment proceedings, abatements, exemptions, or notices of increased assessed valuation affecting the Real Estate.

7.05 Schedule Dates. The information set forth in Schedule F and G is accurate as of the dates set forth on the respective Schedules or, if no date is set forth, as of the Date of Execution.

7.06 Condemnation Proceedings. Except as otherwise disclosed in section D-7, no authority having the right

of condemnation or eminent domain has commenced negotiations with Seller, nor has Seller been notified of the commencement of any legal action against Seller for the damaging, taking or acquiring of all or any part of the Real Estate, either temporarily or permanently, by condemnation or by exercise of the right of eminent domain.

7.07 Other Liens. There are no liens against the Premises other than (a) any existing mortgages.

7.08 Building Inspections and Violations. Seller's warranties with respect to Building inspections and Violation Notices are given in section 8.01and as follows:

In addition, Seller represents and warrants that the Real Estate is now and at all times through the date of Closing shall remain in compliance with the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, the Superfund Amendments and Reauthorization Act of 1986, the Federal Water Pollution Control Act and all other federal, state and local laws relating to pollution or protection of the environment, including, without limitation, laws relating to emissions, discharges, releases or threatened releases of industrial, toxic or hazardous substances or wastes or other pollutants, contaminants, petroleum products or chemicals (collectively, "Hazardous Substances") into the environment (including without limitation, ambient air, surface water, ground water, land surface or subsurface strata) or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Substances (the "Environmental Laws").

Seller further represents and warrants that the Real Estate is not contaminated with any Hazardous Substances and that:

(i) There are no polychlorinated biphenyls (PCBS) generated, treated, stored, disposed of, or otherwise deposited in or located on the Real Estate and there are no underground storage tanks located thereon;

(ii) There has been no "release' as defined in 42 U.S.C. 9601 (22) or, to the knowledge of Seller, threat of a "release" of any Hazardous Substance on, from or under the real Estate;

Seller further represents and warrants that Seller has not received any notice that Seller has any potential liability with respect to the cleanup of any site at which Hazardous Substances have been generated, treated, stored, discharged, emitted or disposed of and there are no past or present or future events, conditions or circumstances which may interfere with or prevent compliance or continued compliance by Seller in accordance with the Environmental Laws or with any order, decree, judgment, injunction, notice or demand issued, entered, promulgated or approved under the Environmental Laws or which may give rise to any common law or other legal liability, including, without limitation, liability under any Environmental Laws or otherwise form the basis of any claim, action, demand, suit, proceeding, hearing, notice of violation, study or investigation, based on or related to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling, or the emission, discharge, release or threatened release into the environments Hazardous Substances by Seller or as a result of any action or omission of Seller.

Article 8. **Building Inspections and Violations**

8.01 Prior Notices. Seller warrants that, except as specified in section D-9, Seller has not received any Violation Notice that was issued prior to the Execution Date, and that no building inspection has been made (after such Date) by a party authorized to initiate or issue a Violation Notice, unless in each such case all required corrective action was completed prior to the Execution Date.

8.02 Future Notices. Seller will promptly (a) send to Purchaser any Violation Notice that Seller receives, and (b) advise Purchaser as to any such inspection that occurs, after the Execution Date.

8.03 Pre-Closing Notices. If a Violation Notice is received by Seller on or after the Execution Date, but before Closing:

a. If the reasonably estimated cost (determined as of the Execution Date) to cure the violation does not exceed the Maximum Correction Amount:

i. Purchaser may elect to accept the Premises subject to the violation, in which event (A) Seller will use best efforts to cure the violation prior to Closing, (B) if necessary Seller will cooperate, without cost or liability to Seller, in any action that Purchaser takes to cure the violation, and (C) Purchaser will be entitled to a credit (against any Cash Balance) at Closing equal to the lesser of (1) the Maximum Correction Amount (reduced by any amounts paid or incurred by Seller after the Date of Execution to cure the violation) and (2) the reasonably estimated cost, determined as of Closing, of curing the violation.

ii. If Purchaser does not so elect, this Contract will terminate within three (3) days and section 14.03 will apply.

b. If the reasonably estimated cost (determined as of the Execution Date) to cure the violation exceeds the Maximum Correction Amount, this Contract will terminate within three (3) days (and section 14.03 will apply) unless Purchaser elects to accept the Premises subject to the violation, in which event Purchaser will be entitled to a credit, against any Cash Balance, at Closing equal to the Maximum Correction Amount, determined as of the Date of Execution.

8.04 Post-Closing Notice. Purchaser will be responsible for any Violation Notice that is received by Seller on or after Closing, and Purchaser will not be entitled to any credit by reason of any matters that gave rise to the Notice.

8.05 Search of Records. Seller, on request by Purchaser, will promptly furnish to Purchaser authorizations to make searches of the permit and violation records of the municipality for the purpose of determining whether notices of violation have been issued with respect to the Premises.

8.06 Definitions:

a. A "Cash Balance" is any amount of cash that Purchaser is to pay to close its purchase of the Premises, excluding the proceeds of any mortgage and excluding any balance of a existing mortgage.

b. The "Maximum Correction Amount" is one half of one percent (.50%) of the Purchase Price.

c. A "Violation Notice" is any notice of violation of any law or of any governmental ordinance, order or requirement that requires that corrective action be taken with respect to the condition or operation of the Premises and that is issued by a governmental department, agency or bureau having jurisdiction of such matters concerning the Premises.

Article 9. Damage, Destruction, and Condemnation

9.01 Damage and Destruction. Seller's obligation to deliver the Premises to Purchaser as described in section 5.04 is subject to the following:

a. If, prior to Closing, any improvements on the Real Estate are destroyed or damaged by fire, other casualty or any act or occurrence other than a deliberate act of Purchaser and the cost to repair exceeds the Maximum Repair Amount, then Purchaser may terminate this Contract (in which event section 14.03 will apply); otherwise Purchaser is required to complete the transaction.

b. In the event of any damage or loss covered by insurance, if this Contract is to be performed, Seller may elect to permit Purchaser to take part in negotiations with the insurance companies, but Seller will receive the proceeds of insurance applicable thereto.

c. The "Maximum Repair Amount" is ten percent (10%) of the Purchase Price.

9.02 Condemnation. If, after the Date of Execution, any authority having the right of condemnation or eminent domain commences negotiations with Seller or commences a proceeding against Seller for the damaging, taking or acquiring

of all or any part of the Real Estate, either temporarily or permanently, by condemnation or by exercise of the right of eminent domain, Seller will immediately give notice thereof to Purchaser. Upon the occurrence of any such event, Purchaser may terminate this Contract by giving notice to Seller on or before the date fixed for Closing, or within 14 days after Purchaser has received notice from Seller, whichever is earlier, in which event section 14.03 will apply. If Purchaser does not so terminate this Contract, Seller will advise Purchaser as to, and will allow Purchaser to participate in, any negotiations regarding such proceedings.

Article 10. Closing; Option for Escrow

10.01 Time and Place of Closing. The closing ("Closing") of the transaction contemplated by this Contract is scheduled to occur on the date specified in item VII, at the time and place specified in section D-10. The actual date of Closing (which is referred to herein as the "Closing Date") will be delayed if mutually agreed upon in writing by the parties hereto.

10.02 Option for Escrow Closing. At the election of either party on notice to the other party not less than five business days prior to the scheduled Closing, this sale will be closed through an escrow with Title Insurer (or affiliate) pursuant to Title Insurer's (or affiliate's) usual form of deed and money escrow contract modified as necessary to conform to this Contract. Either party may elect different escrow provisions not inconsistent with this Contract. On the creation of an escrow under this Section, payment of the Purchase Price and delivery of the deed and all closing documents will be made through the escrow, and the Earnest Money will be deposited in the escrow. The cost of any such escrow will be divided equally between Seller and Purchaser.

Article 11. Seller's Closing Obligations

11.01 At Closing, Seller will deliver the following to Purchaser:

a. Deed and Transfer Declaration. A statutory form of recordable general warranty deed sufficient to convey the title as described in section 4.02, all required real property transfer tax declarations, and (if Seller is a natural person) an affidavit of title executed on the Closing Date.

b. Survey. An ALTA survey of the Real Estate (suitable for extended title insurance coverage), certified or recertified (not earlier than the Execution Date) as required by Purchaser, which survey shall be dated not more than six (6) months prior to the date of closing, showing all improvements presently located therein, including buildings, fences, sidewalks, driveways, etc. In the event the survey discloses encroachments, violations of easements or other violations, this contract, at the option of Purchaser, shall become null and void, and all earnest money shall be returned to Purchaser.

c. FIRPTA and RPTA Certificates. A certificate as provided in the Foreign Investment in Real Property Tax Act of 1980 and a certificate pursuant to the Illinois responsible Property Transfer Act, which Seller and Purchaser acknowledge applies hereto. If such certificates are not furnished, Purchaser may withhold proceeds as provided in such Acts.

d. Illinois Income Tax. A certificate from the Illinois Department of Revenue pursuant to section 902(d) of the Illinois Income Tax Act, showing any amount claimed due from Seller under that Act, or stating that no such amount is due.

e. Internal Revenue Code. All information required to be reported to the Internal Revenue Service pursuant to section 6045(e) of the Internal Revenue Code.

f. Corporate Resolutions. If Seller is a corporation but not a corporate trustee, a resolution of Seller's board of directors authorizing the sale and delivery of the deed, and a certificate executed by the secretary or assistant secretary of Seller certifying the due adoption of the resolution.

g. Possession. Possession of the Premises on the date of closing as called for by section 5.04, and

contemplated hereby, and all keys to the Premises and other items necessary for occupancy by Purchaser.

h. Bill of Sale. A bill of sale transferring title to any personal property or fixtures described in Schedule F with full warranty of title and freedom from encumbrances but without warranty of quality, merchantability, fitness for use or otherwise.

i. Other Documents. An ALTA statement and any other documents (such as a disclosure document under the Illinois Responsible Property Transfer Act) that are required for Seller to perform its obligations under this Contract.

11.02 If Purchaser does not terminate this Contract pursuant to section 9.01(a), Seller will assign to Purchaser all rights of Seller to any insurance proceeds or other proceeds payable by reason of any fire or other casualty loss that is described in section 9.01(a), and will credit Purchaser with the amount of any such proceeds that Seller receives before Closing.

11.03 If Purchaser does not terminate this Contract pursuant to section 9.02, (a) the Purchase Price will be reduced by the total of any awards, settlement funds or other proceeds received by Seller at or before Closing with respect to any damaging, taking or acquiring the Real Estate (as described in section 9.02), and (b) Seller will assign to Purchaser all right of Seller in any awards, settlement funds or other proceeds payable by reason of any such damaging, taking or acquiring the Real Estate.

11.04 Seller's Warranties. All of Seller's warranties in Article 7 and section 8.01 will be deemed to have been re-made as of Closing.

11.05 Status of Leases at Closing. Seller represents and warrants that no lease or tenancy will be in effect at Closing.

Article 123. **Purchaser's Closing Obligations**

12.01 At Closing, Purchaser will:

a. Payment of Purchase Price. Pay to or as directed by Seller the portion of the Purchase Price that is payable at Closing, as adjusted for prorations and escrow deposits.

b. Other Documents. Deliver any other documents that are required for Purchaser to perform its obligations under this Contract.

12.02 Recording. Purchaser will, at the time of Closing, (a) complete all required real property transfer tax declarations, (b) cause all declarations and payments of transfer taxes to be delivered to the appropriate officials, and (c) cause the deed to be recorded.

Article 13. **Prorations, Closing Adjustments and Form of Payment**

13.01 Matters to be Prorated. The parties will arrange for transfer of any utility services. The following prorations will be made as of the end of the Closing Date and will adjust the Purchase Price accordingly:

a. Real estate taxes on the basis of the 105% of the most recent ascertainable tax bills,

b. Any expenses of real estate tax and assessment proceedings, and any water, sewer and vault charges, all on the basis of the period for which assessed,

13.02 The expenses (including attorneys' fees) of any tax proceeding described in section 7.05 will be prorated between Seller and Purchaser in proportion to the time periods to which applicable.

13.03 Transfer Taxes. Seller will pay any and all transfer taxes imposed by state, county and municipal law or ordinance, unless such municipal law or ordinance designates that the Purchaser said transfer tax in which case it shall be Purchaser's responsibility.

13.04 Removal of Certain Title Objections at Closing.

a. If any Closing Charges have not been paid prior to Closing, the Charges (together with any interest and penalties thereon, and the cost of recording or filing any instruments necessary to release the Charges of record) may be paid from funds otherwise payable to Seller at Closing (and will not be treated as defects in Seller's title) if Seller delivers to Purchaser prior to Closing documents (such as bills, pay-off letters and recordable instruments, as applicable) sufficient to discharge the same of record.

b. If Seller so requests a reasonable time before Closing, Purchaser will provide at Closing separate checks for such Charges, payable to the order of the obligee involved, and Purchaser will receive a credit therefor. If Title Insurer is willing to insure both Purchaser and Purchaser's Lender, if any, that such Charges will not be collected out of or enforced against the Real Estate, then, unless Purchaser's Lender reasonably refuses to accept the insurance in lieu of payment and discharge, Seller may (in lieu of payment and discharge) deposit with Title Insurer such funds or assurances, or pay such special or additional premium as Title Insurer may require in order so to insure. In such case the items with respect to which Title Insurer has agreed to provide such insurance will not be considered defects in title.

c. "Closing Charges" are any unpaid taxes, assessments, water and sewer charges and other liens and encumbrances that Seller is required to pay and that would be defects in Seller's title if the same were not paid.

Article 14. **Termination and Default**

14.01 Seller's Default.

a. If Seller defaults by reason of Seller's title being defective (Seller's title will be defective if at Closing Seller's title fails in any material respect to meet the requirements of section 4.02):

i. If Seller's default does not involve Seller's fraud or deceit:

A. Purchaser may elect to accept Seller's title, in which event (1) Purchaser will be entitled at Closing to credit, against any Cash Balance, equal to the reasonably estimated cost (not to exceed the Maximum Cure Amount) to cure the defect, (2) Purchaser will not be entitled to any other claim or credit arising from the defect, (3) Seller will not be required to take any action or to pay any amount to cure the defect, and (4) Seller will have no liability for the defect.

B. If Purchaser does not so elect, this Contract will terminate and section 14.03 will apply.

ii. If Seller's default involved fraud or deceit on Seller's part, Purchaser may elect (A) to proceed as above, or (B) to pursue any available remedy, despite any such election.

b. If Seller otherwise defaults Purchaser may elect (i) to proceed as above, or (ii) to pursue any available remedy, including the right of specific performance.

c. The "Maximum Cure Amount" is ten percent (10%) of the Purchase Price.

14.02 Purchaser's Default. If Purchaser defaults , and such default does not involve fraud or deception, Seller shall retain the Earnest Money as full compensation for all loss (in which event the Earnest Money will be treated as

liquidated damages). If Purchaser's default involves fraud and/or deception on Purchaser's part, Seller shall retain the earnest money and also be able to pursue other available remedies.

14.03 Termination. If this Contract terminates, no party hereto will thereafter have any obligation or liability under the Contract, but (a) Seller will cause the Earnest Money, and any earnings thereon, to be promptly refunded to Purchaser, (b) the parties will terminate any deed-and-money escrow, and (c) Purchaser will return to Seller any material (such as leases, Building plans and financial statements) that Purchaser received from Seller, and will reasonably restore the Real Estate after any action (such as soil tests) that Purchaser had taken.

Article 15. **Notices**

15.01 Any authorization, consent, demand, election, notice or request that is provided for or giving hereunder (herein, collectively, "Notices"), must be in writing, signed by the party giving the same, and delivered or mailed to the intended recipient, and such recipient's legal counsel. A Notice will be deemed to have been given:

a. If delivered: when delivered.

b. If by facsimile transmission: when actually sent, if followed by mailing via regular mail;

c. If mailed: three (3) days after an envelope containing the same is mailed, postage pre-paid by registered mail, to the addressee (at the addressee's address as shown in section D-11) from a post office located in the city to which or from which the notice is sent.

d. Any Notice that is in fact received will be effective when received, whether or not mailed as provided above.

15.02 The address of a party may be changed by Notice given as provided above.

Article 16. **Broker**

16.01 Identity of Brokers. If a broker is identified in Item IX, Seller and Purchaser mutually represent and warrant that the brokers so specified are the only brokers with whom they have dealt in connection with this Contract and that neither Seller nor Purchaser knows of any other broker who has claimed or may have the right to claim a commission in connection with this Contract, unless otherwise specified in section D-12.

16.02 Broker's Commission. The broker's commission will be paid pursuant to separate agreement by the party specified in section D-13. If no broker is specified in item IX, the parties warrant that this Contract was brought about by direct negotiation between Seller and Purchaser and that neither Seller nor Purchaser knows of any broker entitled to a commission in connection with this Contract.

16.03 Indemnity. Seller and Purchaser will indemnify and defend each other against any costs, claims or expenses, including attorneys' fees, arising out of the breach on their respective parts of any provision hereof..

Article 17. **Miscellaneous**

17.01 Assignment. Purchaser may assign this Contract or Purchaser's rights hereunder upon the prior written consent of Seller (which consent shall not be unreasonably withheld). No permitted assignment of Purchaser's rights under this Contract will be effective against Seller until an executed counterpart of the instrument of assignment has been delivered to Seller and Seller has been furnished with the name and address of the assignee.

17.02 Time. Time is of the essence of this Contract. If a time period would expire on other than a week day

that is a full business day, the time period will be extended to the next week day that is a full business day.

17.03 Amendment. No provision of this Contract may be waived, modified, amended, discharged or terminated except by an instrument signed by the party against whom the enforcement thereof is sought, and then only to the extent set forth in the instrument.

17.04 Governing Law. This Contract will be governed by, and construed in accordance with, the law of the State of Illinois. Venue for any litigation shall be in the Eighteenth Judicial Circuit Court of DuPage County, Illinois.

170.05 Captions. The captions in this Contract are provided for convenience of reference only and do not by themselves define, describe or limit the scope or intent of the Contract.

17.06 Binding Effect. This Contract will be binding on and will inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors and permitted assigns.

17.07 Gender and Number. As used in this Contract and unless otherwise required by the context, any pronoun includes the masculine, the feminine, and the neuter; the singular includes the plural and the plural includes the singular.

17.08 Representative. Unless otherwise provided herein, a representative of a party may act for the party.

17.09 Schedules and Riders. If the provisions of any Schedule or rider attached to this Contract are inconsistent with the provisions of the Contract, the provisions of the Schedule or rider will prevail. The first page of this Contract contains a list of all Schedules and riders that form part of this Contract.

17.10 Possession. If Purchaser is unable to occupy the premises as of the date of closing, Seller shall pay Purchaser rent therefor at an annual rate equal to $11.00 per square foot net, from the closing date up to the date that possession is actually delivered. Said rent shall be prepaid and held back from the proceeds of sale in an escrow, the terms of which shall be determined at the Closing.

Schedule A - Premises and Ownership

1. Street address: 2424 Wisconsin Avenue, Downers Grove, Illinois

2. Permanent Index No.: ___-___-___-___-___

3. Ownership: Fee simple title is held by [check one]:

   a. [ ] Seller

   b. [ ] _____ as Trustee under trust agreement dated _____, known as Trust No. _____.

   c. [ ] _____

4. Legal description:

Schedule B - Permitted Exceptions

1. General exclusions in the title policy to be provided to Purchaser, except that zoning laws, regulations and ordinances will be treated as Permitted Exceptions only if the Title Insurer insures Purchaser that the same are not violated by the existing structures on, or present use of, the Real Estate.

2. Real estate taxes, special assessments and installments thereof, that are not in default as to payment.

3. Any liens listed pursuant to section 7.11 (unless otherwise provided in section D-9) and any existing mortgages.

4. a. Rights of utility and cable television companies to lay, maintain, install and repair pipes, lines, poles, conduits, cable boxes and related equipment on, over and under the Real Estate, provided that (i) none of such rights imposes any monetary obligation on the owner of the Premises, (ii) the existing improvements do not violate any of such rights, and (iii) the exercise of such rights would not adversely affect major improvements on the Real Estate.

   b. Encroachments of stoops, cellar steps, trim cornices, lintels, window sills, awnings, canopies, ledges, fences, hedges, coping and retaining walls projecting from the Real Estate over any street or highway or over any adjoining property, and encroachments of similar elements projecting from adjoining property over the Real Estate.

   c. Revocability or lack of right to maintain vaults, coal chutes, excavations or sub-surface equipment beyond the line of the Real Estate.

   d. Matters that would be disclosed by an inspection of the Real Estate on the Date of Execution, and the state of facts disclosed by the following survey:

Schedule C - Purchase Price, Deposits and Continuing Mortgages

C-1. The Purchase Price is specified at item IV and will be paid as follows:

a. The Earnest Money specified at item V will be paid $5,000.00 on the date herteof, and $45,000.00, payable within ten (10) days of Seller's acceptance hereof..

b. The balance of the Purchase Price will be paid (subject to prorations and closing adjustments) in cash to Seller.

C-2. Any cash held by Holder will be invested in an interest-bearing account with a federally-insured financial institution for the benefit of the parties hereto.

Schedule D - Miscellaneous

D-1. Seller's taxpayer identification number [section 2.02-c]_____

D-2. Purchaser's taxpayer identification number [section 2.02-c]_____

D-3. Mortgage contingency [section 3.01]. Purchaser's mortgage contingency includes the amount specified at item VIII and the following items:

a. Interest rate not to exceed 9.0% per annum (or such higher rate as Purchaser may accept).

b. Amortization period shall not to be less than twenty (20) years (or such shorter period as Purchaser may accept).

c. Points, commissions, fees and other closing costs (except for Purchaser's Lender's out-of-pocket disbursements) not to exceed 3.00% (or such higher amount as Purchaser may accept).

d.. Purchaser will not be personally liable under the mortgage documents unless Purchaser has initialled here _____

e. The date by which (or time period within which) Purchaser is to have obtained a mortgage commitment [section 3.02] is forty-five (45) days from the date of Seller's acceptance hereof.

D-4. Assessed valuation of the Real Estate [section 7.08] $_____ for the year 19__

D-5. Annual real estate taxes on the Real Estate [section 7.08]:

Amount	Year

D-6. Tax and assessment proceedings, abatements, exemptions or notices of increased assessed valuation affecting the Real Estate [section 7.08] _____

D-7. Condemnation proceedings [section 7.10] _____

D-8. Other liens (these liens will be treated as Permitted Exceptions unless otherwise noted here) [section 8.13] _____

D-9. Violation Notices [section 9.01] _____

D-10. Time and Place of Closing [section 11.01] _____

D-11. Address for notices [section 17.01]

If to Seller:

_____

_____

_____

with a copy to Seller's attorney:

Mr. William Ulrich
Hinshaw & Culbertson

4343 Commerce Court Suite 415

Lisle, Illinois 60532
(630) 505-0010
(630) 505-0959 (Fax)

If to Purchaser:

_____

_____

_____

with a copy to Purchaser's attorney:

Barry P. Siegal, Ltd.

230 West Monroe Street, #325

Chicago, Illinois 60606
Attn: Nat Pomrenze
(312) 782-5910
(312) 263-5645 (Fax)

D-12. Additional broker, if any [section 18.01] _____

D-13. Party to pay broker's commission [section 18.02]: _____

D-14. The indemnity provisions of section 18.03 will not apply:

[ ] Purchaser's initials

[ ] Seller's initials

Schedule E - Provisions for Purchase Money Mortgage

[Not Applicable]

Schedule F - Personal Property to be Conveyed

EXHIBIT B

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

DEC 2 8 2004

SPECIAL NOTICE LETTER
URGENT LEGAL MATTER – PROMPT REPLY NECESSARY
CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Wisconsin Avenue Property LLC
c/o Michael Caron
Bloch, Caron & Lyon
790 Estate Drive, # 180
Deerfield, Illinois 60015

Re: Ellsworth Industrial Park Site
Downers Grove, Illinois

Dear Sir or Madam:

The United States Environmental Protection Agency (U.S. EPA) and certain Potentially Responsible Parties (PRPs) have undertaken response actions at the Ellsworth Industrial Park Site in Downers Grove, Illinois (the Site) pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C.§ 9601 *et seq.* (CERCLA). These actions included extensive sampling in and around the Site to document the release or threatened release of hazardous substances, pollutants, and contaminants at the Site. These actions have also included funding for hooking up to a public water supply certain residents in areas potentially affected by releases of Site-related hazardous substances into groundwater.

Further Response Actions

Based on the sampling results in and around the Site, U.S. EPA has determined that a Remedial Investigation/Feasibility Study (RI/FS) is now necessary for properties in the Ellsworth Industrial Park. An RI will identify site characteristics and define the nature and extent of soil, air, surface water and groundwater contamination in the Ellsworth Industrial Park and the risks posed by that contamination. An FS will evaluate different cleanup options for the contamination.

Recycled/Recyclable . Printed with Vegetable Oil Based Inks on 100% Recycled Paper (50% Postconsumer)

Unless U.S. EPA determines that PRPs will voluntarily undertake or fund the RI/FS necessary at the Site, U.S. EPA may, under Section 104 of CERCLA, undertake the RI/FS itself and, under Section 107 of CERCLA, seek reimbursement from PRPs of all costs incurred in connection with the actions taken. Such costs may include, but are not limited to, expenditures for investigation, planning, response and enforcement activities. Moreover, under Section 106 of CERCLA, U.S. EPA may order PRPs to implement response actions deemed necessary by U.S. EPA to protect the public health, welfare or environment from an imminent and substantial endangerment because of an actual or threatened release of a hazardous substance from a Facility.

PRP Determination

PRPs under Section 107 of CERCLA include current owners and operators at the Site and former owners and operators at the Site at the time of disposal of hazardous substances, as well as persons who owned or possessed hazardous substances and arranged for disposal, treatment, or transportation of such hazardous substances and persons who accepted hazardous substances for transportation for disposal or treatment to a facility selected by such transporter. Based on an extensive review of records related to the release and/or disposal of hazardous substances at the Site, U.S. EPA has identified you as one of several PRPs with respect to the Site. A general description of the sources of information regarding PRPs at the Site is provided as Enclosure A to this letter. A listing of the PRPs for the Site is provided as Enclosure B to this letter. By this letter, U.S. EPA notifies you of your potential liability with regard to this matter and encourages you, as a PRP, to voluntarily perform or finance the RI/FS and any other response activities that the U.S. EPA has determined or will determine are required at the Site.

Special Notice and Negotiation

Pursuant to Section 122(e)(1) of CERCLA, U.S. EPA has determined that a period of negotiation may facilitate an agreement between the PRPs and U.S. EPA for implementation or financing of an RI/FS for the Industrial Park portion of the Site. Accordingly, U.S. EPA is contacting PRPs identified for the Site to resolve their liability with respect to the RI/FS. To assist you in negotiating with U.S. EPA concerning this matter, attached to this letter is a list of the names and addresses of other PRPs to whom this notification is being sent. It should be noted that inclusion on or exclusion from this list does not constitute a final determination by U.S. EPA concerning the liability of any party for remediation of the Site or for payment of U.S. EPA's response costs.

Upon your receipt of this Special Notice, you will have a maximum of 60 days to coordinate with any PRPs and to present to U.S. EPA a "good faith offer" to conduct and/or finance the remedial action to negotiate the terms of a administrative order on consent. In accordance with the requirements of Section 122(e)(2), during this 60-day moratorium, U.S. EPA will not commence remedial action at the Site. U.S. EPA may, however, take action at the Site at any time should a significant threat to human health or the environment arise.

Good Faith Offer

During the 60-day moratorium period, you and the other PRPs are invited to participate in negotiations with U.S. EPA in an effort to reach a settlement to conduct or finance the RI/FS. The 60-day negotiation period will be extended for up to an additional 30 days if PRPs provide U.S. EPA with a "good faith offer" to conduct or finance the RI/FS. The purpose of this additional time is to allow the PRPs and U.S. EPA a period of time to finalize the settlement, which would be embodied in an Administrative Order on Consent (AOC).

A "good faith offer" as referenced above shall include the following:

* a statement of the PRPs' willingness to conduct or finance an RI/FS which is consistent with the proposed AOC and Statement of Work (SOW) and which provides a sufficient basis for further negotiations in light of U.S. EPA's SOW;

* a detailed response to, and detailed comments, if any, on the attached proposed AOC and SOW. If the offer contemplates modifications to the AOC or SOW, it should make revisions or edits to the enclosed drafts and submit them to U.S. EPA, clearly identifying any such modifications. The response should provide explanations for any major revisions to the attached proposals;

* a demonstration of the PRPs' technical capability to undertake the RI/FS. This includes identifying the firm expected to conduct the work, or identifying the process the PRPs will undertake to select a firm;

* a demonstration of the PRPs' capability to finance the RI/FS;

* a statement concerning the PRPs' willingness to reimburse U.S. EPA for past response and oversight costs; and

* the name, address, and phone number of the party or steering committee who will represent the PRPs in negotiations.

If U.S. EPA determines that your proposal is not a "good faith offer," you will be notified in writing of U.S. EPA's decision to end the moratorium. If a "good faith offer" is not received within the initial 60-day moratorium, or if a timely settlement cannot be reached, U.S. EPA, pursuant to Section 122(e)(4), may proceed to immediately undertake such further action as is authorized by law, including funding the RI/FS and pursuing a cost recovery claim against the PRPs and/or issuing a Unilateral Administrative Order requiring PRPs to perform the RI/FS.

PRP List

As stated above, the attached list of the names and addresses of any other PRPs to whom this notification is being sent is provided to assist you in contacting other PRPs in this matter and to negotiate with U.S. EPA. This list is appended as Enclosure B to this letter. Information regarding a ranking by volume and nature of substances contributed by each PRP, as contemplated by Section 122(e)(4)(A), is not available at this time.

U.S. EPA recommends that all PRPs form a steering committee responsible for representing the group's interests. A steering committee was formed among the PRPs who previously received a special notice letter from U.S. EPA for the Site and agreed to fund drinking water hookups under an Order with U.S. EPA. The PRP Group contacts under that Order are Bruce White of Karaganis, White & Magel; 414 North Orleans Street - Suite 810, Chicago, Illinois 60610 and Brett Heinrich of Meckler, Bulger & Tilson, 123 North Wacker Drive - Suite 1800, Chicago, Illinois 60606.

U.S. EPA recognizes that the allocation of responsibility among the PRPs may be difficult. If the PRPs are unable to reach a consensus among themselves, U.S. EPA encourages the use of a neutral third party to help allocate responsibility and facilitate negotiations among the PRPs. At the PRPs' request, U.S. EPA may help arrange for a third party neutral to assist the parties.

Initial Conference

To further facilitate your and any other PRPs' ability to present a "good faith offer" within the 60-day time limit, an initial settlement conference will be held on January 12, 2005, in the Lake Superior room, 12th floor, 77 West Jackson Boulevard, Chicago, Illinois at 1:30 p.m. An agenda indicating the topics for discussion is appended as Enclosure C. A draft AOC and a SOW are enclosed as Enclosures D and E, respectively.

90 Day Deadline

Except in extraordinary circumstances explained in a written request, no extension to the *second 30 day moratorium period* will be granted by U.S. EPA. As stated above, if no agreement can be reached, pursuant to Section 122(e)(4), U.S. EPA may immediately proceed to undertake such further action as authorized by law to conduct or require an RI/FS at the Site.

U.S. EPA Notification

As a PRP, you should notify U.S. EPA in writing within 10 days of receipt of this letter of your willingness to participate in negotiations to perform or finance the activities described above. If U.S. EPA does not receive a timely response, U.S. EPA will assume that you do not wish to negotiate a resolution of your potential responsibility in connection with the Site and that you have declined any involvement in performing the response activities.

The response to this special notice letter should indicate the appropriate names, addresses, telephone numbers, fax numbers, and e-mail addresses for further contact with you. The response letter should be sent to:

Ross delRosario, RPM
Remedial Response Section #5
U.S. Environmental Protection Agency
77 W. Jackson Blvd. (SR-6J)
Chicago, Illinois 60604-3590

-or-

Thomas Krueger, Associate Regional Counsel
U.S. Environmental Protection Agency
77 W. Jackson Blvd. (C-14J)
Chicago, Illinois 60604-3590

The factual and legal discussions in this letter are intended solely to provide notice and information, and such discussions are not to be construed as a final U.S. EPA position on any matter set forth herein. Due to the seriousness of the environmental and legal problems posed by conditions at the Site, U.S. EPA urges that you give immediate attention, and provide a prompt response, to this letter.

Administrative Record

In accordance with Section 113 of CERCLA, 42 U.S.C. § 9613, U.S. EPA has established an Administrative Record containing the documents that serve as the basis for U.S. EPA's determination that an RI/FS is necessary for the Ellsworth Industrial Park. This Administrative Record is located at the Downers Grove Public Library, 1050 Curtiss Street, Downers Grove, Illinois and is available to the public for inspection and comment. The Administrative Record is also available, by appointment, for inspection and comment at the Superfund Records Center, U.S. EPA Region 5, 77 West Jackson Boulevard, 7th floor, Chicago, Illinois. You may wish to review the Administrative Record to assist you in responding to this letter, but your review should not delay such response beyond the 60-day period provided by CERCLA.

Natural Resource Trustee Notification

By a copy of this letter, U.S. EPA is notifying the State of Illinois and the Natural Resources Trustees, in accordance with Section 122(j) of CERCLA, of its intent to enter into negotiations concerning the conduct of an RI/FS at the Site.

Resources and Information for Small Businesses

As you may be aware, on January 11, 2002, President Bush signed into law the Superfund Small Business Liability Relief and Brownfields Revitalization Act. This Act contains several exemptions and defenses to CERCLA liability, which we suggest that all parties evaluate. You may obtain a copy of the law via the Internet at http://www.epa.gov/swerosps/bf/sblrbra.htm and review EPA guidances regarding these exemptions at http://www.epa.gov/compliance/ resources/policies/cleanup/superfund.

U.S. EPA has created a number of helpful resources for small businesses. U.S. EPA has established the National Compliance Assistance Clearinghouse as well as Compliance Assistance Centers which offer various forms of resources to small businesses. You may inquire about these resources at http://www.epa.gov. In addition, the U.S. EPA Small Business Ombudsman may be contacted at http://www.epa.gov/sbo. Finally, U.S. EPA developed a fact sheet about the Small Business Regulatory Enforcement Fairness Act ("SBREFA"), which is available on request.

Further Information

If you need further information regarding this letter, you may contact Mr. delRosario, the Remedial Project Manager at (312) 886-6195. If you have an attorney handling your legal matters, please direct his or her questions to Mr. Krueger at (312) 886-0562.

We hope that you will give this matter your immediate attention.

Sincerely,

for Wendy L. Carney, Chief
Remedial Response Branch #1

Enclosures

A. Site Activities and Information
B. PRP Service List
C. Negotiation Meeting Discussion Items
D. AOC
E. SOW
F. SBREFA Fact Sheet

cc: Fred Nika, Illinois EPA
Renee Cipriano, Illinois EPA
Karen Yates, Illinois EPA
Beth Wallace, Office of Illinois Attorney General
Joel Brunsvold, Illinois DNR
Michael T. Chezik, Natural Resources Damages Trustee

ENCLOSURE A

SITE ACTIVITIES AND INFORMATION

1. The Ellsworth Industrial Park Site located in Downers Grove, Illinois, encompasses an area in which groundwater is contaminated with chlorinated solvents. The Site is a mix of residential, recreational, and commercial/light industry properties. It is bounded by Burlington Avenue to the north, 63rd Street to the south, Lee and Springside Avenues to the east, and Interstate 355 (I-355) to the west.

2. The U.S. EPA has evaluated a large body of information and evidence in connection with its investigation of the Site. Based on these investigations, the U.S. EPA has information indicating that you are a PRP with respect to this Site. Specifically, the U.S. EPA has reason to believe that you are the owner/operator of a portion of the facility, or a former owner/operator of the facility at the time of disposal of hazardous substances at the facility.

3. The U.S. EPA and Illinois EPA have conducted and arranged for sampling and studies at the Site, including the Phase I and Phase II Site Assessments and Data Evaluation Summary Report prepared by Weston Solutions, Inc.

4. Response costs associated with the Site have been incurred by the U.S. EPA. The total U.S. EPA cost incurred for the above referenced studies and other response activities related to the Site is currently being determined.

ENCLOSURE B

POTENTIALLY RESPONSIBLE PARTIES

Ames Supply Company
2537 Curtiss Street
Downers Grove, Illinois 60515
fax: (630) 964-0497

Ames Supply Company
c/o Alan P. Bielawski
Sidley Austin Brown & Wood
Bank One Plaza
10 South Dearborn Street
Chicago, Illinois 60603
fax: (312) 853-7036

Arrow Gear
James E. Pielsticker, Exec. Vice President
2301 Curtiss Street
Downers Grove, Illinois 60515-4036
fax: (630) 969-0253

Arrow Gear
c/o Carey S. Rosemarin
707 Skokie Blvd., Suite 505
Northbrook, Illinois 60062-2857
fax: (312) 896-5786

Bison Gear & Engineering Co.
3850 Ohio Avenue
St. Charles, Illinois 60174
fax: (630) 377-6777

Bison Gear & Engineering Co.
c/o Joseph A. Strubbe
Vedder, Price, Kaufman & Kammholz
222 N. LaSalle Street
Chicago, Illinois 60601
fax: (312) 609-5005

Chase Belmont Properties
5103 Chase
Downers Grove, Illinois 60515-4012

Chase Belmont Properties
c/o Jeffrey D. Jeep
The Jeff Diver Group, LLC
1749 South Naperville Road
Suite 102
Wheaton, Illinois 60187
fax: (630) 690-2812

Dynagear, Inc.
2500 Curtiss Street
Downers Grove, Illinois 60515

Dynagear, Inc.
c/o David N. Missner
Piper Rudnick, LLP
203 N. LaSalle Street
Suite 1900
Chicago, Illinois 60601-1293
fax: (312) 630-7399

Fusibond Piping Systems
2615 Curtiss Street
Downers Grove, Illinois 60515
fax: (630) 969-2355

Fusibond Piping Systems
c/o Brett D. Heinrich
Meckler, Bulger & Tilson
123 North Wacker Drive - Suite 1800
Chicago, Illinois 60606
fax: (312) 474-7898

Global Gear & Machining, LLC
2500 Curtiss Street
Downers Grove, Illinois 60515
fax: (630) 969-1736

Global Gear & Manufacturing, LLC
c/o Michael J. Hughes
Neal, Gerber & Eisenberg
2 North LaSalle Street
Chicago, Illinois 60602-3801
fax: (312) 269-1747

William Helwig
9S456 Millbrook Drive
Downers Grove, IL 60516-5040

William Helwig
c/o Eric L. Samore
Molly A. Caprez
O'Hagan, Smith & Amundsen LLC
150 North Michigan Avenue, Suite 3300
Chicago, Illinois 60601
312-894-3200
fax: (312) 894-3210

Katrine Family Limited Partnership
c/o Lindy Manufacturing Company
David A. Collins, President
6 South 167 Canterbury Court
Naperville, Illinois 60540
fax: (630) 963-5308

Lindy Manufacturing Company
David A. Collins, President
6 South 167 Canterbury Court
Naperville, Illinois 60540
fax: (630) 963-5308

Lindy Manufacturing Company
c/o Linda P. Kurtos
Eimer Stahl Klevorn & Solberg
122 S. Michigan Avenue, Suite 1776
Chicago, Illinois 60603
fax: (312) 692-1718

Lovejoy, Inc.
2655 Wisconsin Avenue
Downers Grove, Illinois 60515
fax: (630) 852-2120

Lovejoy, Inc.
c/o Nancy J. Rich
Katten Muchin Zavis Rosenman
525 West Monroe Street
Suite 1600
Chicago, Illinois 60661-3693
fax: (312) 902-1061

Magnetrol International, Inc.
5300 Belmont Road
Downers Grove, Illinois 60515
fax: (630) 969-9489

Magnetrol International, Inc.
c/o Michael J. Maher
Swanson, Martin & Bell
One IBM Plaza - Suite 2900
330 North Wabash
Chicago, Illinois 60611
fax: (312) 321-0990

The Morey Corporation
Dana Morey, Vice President
100 Morey Drive
Woodridge, Illinois 60517
fax: (630) 754-2001

The Morey Corporation
c/o Gary S. Rovner
Foley & Lardner
321 North Clark
Suite 2800
Chicago, Illinois 60610
fax: (312) 832-4700

Precision Brand Products, Inc.
2250 Curtiss Street
Downers Grove, Illinois 60515
fax: (630) 969-0310

Precision Brand Products, Inc.
c/o A. Bruce White
Karaganis, White & Magel
414 North Orleans Street - Suite 810
Chicago, Illinois 60610
fax: (312) 836-9083

Principal Manufacturing Corporation
Paul A. Barnett, President
2800 S. 19th Avenue
Broadview, Illinois 60153
fax: (708) 865-7632

Principal Manufacturing Corporation
c/o Lawrence H. Brenman
Much Shelist Freed Denenberg Ament & Rubenstein
191 North Wacker Drive
Suite 1800
Chicago, Illinois 60606
fax: (312) 521-2571

Rexnord Corporation
2400 Curtiss Street
Downers Grove, Illinois 60515
fax: (630) 969-8827

Rexnord Corporation
c/o Todd R. Weiner
McDermoot, Will & Emery
227 West Monroe Street
Chicago, Illinois 60606-5096
fax: (312) 984-2098

RHI Holdings, Inc.
1750 Tyson's Boulevard, Suite 1400
McLean, Virginia 22101

RHI Holdings, Inc.
c/o Peter V. Baugher
Schopf & Weiss
312 West Randolph Street, Suite 300
Chicago, Illinois 60606-1721
fax: (312) 701-9335

Scot Incorporated
Randy Slaboch, Director of Operations
2525 Curtiss Street
Downers Grove, Illinois 60615
fax: (630) 969-4719

Scot Incorporated
c/o Edward V. Walsh, III
Sachnoff & Weaver
30 South Wacker Drive
29th Floor
Chicago, Illinois 60606-7484
fax: (312) 207-6400

Tricon Industries, Inc.
Randolph Grandle, President
1600 Eisenhower Lane, #200
Lisle, Illinois 60532
fax: (630) 963-0597

Tricon Industries, Inc.
c/o Carol A. Douglas
Ungaretti & Harris
3500 Three Bank One Plaza
Chicago, Illinois 60602
fax: (312) 977-4405

White Lake Building Corp.
2537 Curtiss Street
Downers Grove, Illinois 60515
fax: (630) 964-0497

White Lake Building Corp.
c/o John W. Loseman
Lewis, Overbeck & Furman
135 S. LaSalle Street
Suite 2300
Chicago, Illinois 60603
fax: (312) 580-1200

Wisconsin Avenue Property LLC
527 North Sheridan Road
Waukegan, Illinois 60085

Wisconsin Avenue Property LLC
c/o Johnine J. Brown
836 West Ancona Street
Chicago, Illinois 60622
fax: (312) 829-0758

Wisconsin Avenue Property LLC
c/o Michael Caron
Bloch, Caron & Lyon
790 Estate Drive, # 180
Deerfield, Illnois 60015
fax: (847) 945-8812

ENCLOSURE C

NEGOTIATION MEETING DISCUSSION ITEMS

January 12, 2005
Lake Superior, 12th floor
77 West Jackson Boulevard
Chicago, Illinois
1:30 p.m.

Topics for discussion:

*Background Information on the Site

*Response Activities to Date

*Liability of Responsible Parties Under CERCLA

*Explanation of Expected PRP Response Activities

*Structure of Consent Order Negotiations

*Allocation/ADR issues

ENCLOSURE D

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5

ELLSWORTH INDUSTRIAL PARK SITE
DOWNERS GROVE, ILLINOIS

ADMINISTRATIVE ORDER BY
CONSENT PURSUANT TO
SECTIONS 104, 107 AND 122 OF CERCLA

TABLE OF CONTENTS

I. JURISDICTION AND GENERAL PROVISIONS 1

II. PARTIES BOUND 2

III. STATEMENT OF PURPOSE 2

IV. FINDINGS OF FACT 3

V. CONCLUSIONS OF LAW AND DETERMINATIONS 4

VI. ORDER 4
1. Designation of Contractor, Project Coordinator, On-Scene Coordinator or Remedial Project Manager 5
2. Work to Be Performed 7
3. Access to Property and Information 16
4. Record Retention, Documentation, Availability of Information 18
5. Off-Site Shipments 19
6. Compliance With Other Laws 19
7. Emergency Response and Notification of Releases . . 20

VII. AUTHORITY OF THE U.S. EPA REMEDIAL PROJECT MANAGER 20

VIII. REIMBURSEMENT OF COSTS 21

IX. DISPUTE RESOLUTION 22

X. FORCE MAJEURE 23

XI. STIPULATED AND STATUTORY PENALTIES 24

XII. RESERVATION OF RIGHTS 27

XIII. OTHER CLAIMS 27

XIV. COVENANT NOT TO SUE BY U.S. EPA 28

XV. COVENANT NOT TO SUE BY RESPONDENTS 28

XVI. CONTRIBUTION PROTECTION 29

XVII. INDEMNIFICATION 30

XVIII. MODIFICATIONS 31

XIX. NOTICE OF COMPLETION 31

XX. SUBMITTALS/CORRESPONDENCE 32

XXI. SEVERABILITY 33

XXII. FINANCIAL ASSURANCE AND INSURANCE 33

XXIII. EFFECTIVE DATE AND COMPUTATION OF TIME 34

SIGNATORIES 35

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	Docket No.
	)	
ELLSWORTH INDUSTRIAL PARK SITE	)	ADMINISTRATIVE ORDER BY
	)	CONSENT PURSUANT TO
DOWNERS GROVE, ILLINOIS	)	SECTIONS 104, 107 & 122 OF THE
	)	COMPREHENSIVE ENVIRONMENTAL
Respondents:	)	RESPONSE, COMPENSATION, AND
	)	LIABILITY ACT, as amended,
Listed in Attachment A	)	42 U.S.C. §§ 9604, 9607 and
	)	9622

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Order by Consent (the "Order") is entered voluntarily by the United States Environmental Protection Agency ("U.S. EPA") and the Respondents. The Order is issued pursuant to the authority vested in the President of the United States by Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §§ 9604, 9607 and 9622. This authority has been delegated to the Administrator of the U.S. EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the Regional Administrators by U.S. EPA Delegation Nos. 14-14-A, 14-14-C and 14-14-D, and to the Director, Superfund Division, Region 5, by Regional Delegation Nos. 14-14-A, 14-14-C and 14-14-D.

2. This Order requires the Respondents to conduct a Remedial Investigation and Feasibility Study ("RI/FS") to investigate the nature and extent of contamination at the industrial park portion of the Ellsworth Industrial Park Site in Downers Grove, Illinois (the "Site"), which is generally depicted in figure A, and to develop and evaluate potential remedial alternatives. The RI/FS shall evaluate response actions consistent with 40 CFR Part 300.430, to address the environmental concerns in connection with the areas of contamination located within and surrounding the industrial park portion of the Site. Remedial action(s) selected through the RI/FS process will be implemented pursuant to a Record of Decision to be issued by U.S. EPA.

3. A copy of this Order will also be provided to the State of Illinois, which has been notified of the issuance of this Order. The U.S. EPA has also notified the Federal Natural Resource trustees of the negotiations in this action pursuant to the requirements of Section 122(j) of CERCLA.

4. U.S. EPA and Respondents recognize that this Order has been negotiated in good faith and that the actions undertaken by Respondents in accordance with this Order do not constitute an admission of any liability. Respondents do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Order, the validity of the findings of facts, conclusions of law, and determinations in Sections IV and V of this Order. Respondents agree to comply with and be bound by the terms of this Order and further agree that they will not contest the basis or validity of this Order or its terms, except as stated in this paragraph 4.

II. PARTIES BOUND

5. This Order applies to and is binding upon U.S. EPA and upon Respondents and Respondents' heirs, receivers, trustees, successors and assigns. Any change in ownership or corporate status of Respondents including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondents' responsibilities under this Order. Respondents are jointly and severally liable for carrying out all activities required by this Order. Respondents are jointly and severally liable to carry out all activities required by this Order. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Order, the remaining Respondents shall complete all such requirements and shall be entitled to seek recovery or bring any other action allowed by law or pursuant to separate agreement among the Respondents regarding their participation in this Order against those Respondents who fail to comply with the Order for any reason, notwithstanding the contribution protection provision in Section XVI, paragraph 100, of this Order.

6. Respondents shall ensure that their contractors, subcontractors, and representatives receive a copy of this Order, and comply with this Order. Respondents shall be responsible for any noncompliance with this Order.

III. STATEMENT OF PURPOSE

7. In entering into this Order, the objectives of U.S. EPA and the Respondents are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the industrial park portion of the Site by conducting a remedial investigation as more specifically set forth in the Statement of Work ("SOW") attached as Attachment A to this Order; (b) to

determine and evaluate alternatives for remedial action to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the industrial park portion of the Site, by conducting a feasibility study as more specifically set forth in the SOW attached as Attachment A to this Order; and (c) to provide for the recovery of oversight costs incurred by U.S. EPA with respect to this Order.

IV. FINDINGS OF FACT

8. Based on available information, including the Administrative Record in this matter, U.S. EPA hereby finds, and, for purposes of enforceability of this Order only, the Respondents stipulate that the factual statutory prerequisites under CERCLA necessary for issuance of this Order have been met. U.S. EPA's findings and this stipulation include the following:

a. The industrial park portion of the Site is located in Downers Grove, Illinois. The approximate borders of the industrial park are Burlington Avenue on the north, Belmont Road on the east, Elmore and Inverness Avenues on the south, and I-355 on the west. St. Joseph's Creek runs through the northern end of the Site. The Site also includes areas to the south and east of the industrial park where groundwater contamination has come to be located. A map depicting the general location of the Site is appended as Attachment B.

b. The industrial park portion of the Site was developed beginning in the early 1960s. Prior to that development, the property was used as farmland. The industrial park is now surrounded by residential development.

c. Respondents are present or past owners and/or operators of industrial properties at the Site.

d. Respondents have used solvents containing volatile organic compounds ("VOCs") in their plant operations, and releases of VOCs have been detected or are suspected at those properties.

e. Soil and groundwater sampling results obtained during Site investigations by U.S. EPA and the Illinois Environmental Protection Agency ("IEPA") identified high levels of the VOCs trichloroethylene ("TCE"), tetrachloroethylene ("PCE") and 1,1,1-trichloroethane ("TCA") in soil and groundwater at the Site. Sampling data collected by IEPA also indicates that TCE, PCE and TCA contamination from the Site migrated to hundreds of drinking water wells located to the south and

east of the industrial park portion of the Site. These results are summarized in reports dated August 2002 and August 3, 2004, prepared for U.S. EPA by Weston Solutions, Inc.

f. On August 8, 2003, a group of potentially responsible parties ("PRPs"), including many of the Respondents, entered an Administrative Order on Consent with U.S. EPA. Under that Administrative Order on Consent, the PRPs agreed to pay up to $4.275 million to pay for hooking approximately 800 residences to the south and east of the industrial park to a public drinking water supply.

g. The State of Illinois has indicated its intention to propose this Site for listing on the National Priorities List.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

9. Based on the Findings of Fact set forth above, and the Administrative Record in this matter, U.S. EPA has determined that:

a. The Ellsworth Industrial Park Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. TCE, PCE and TCA are "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

c. Each Respondent is a "person" as defined by Section 101(21)of CERCLA, 42 U.S.C. § 9601(21).

d. Respondents are: (1) the "owners" and/or "operators" of portions of the Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1); and/or (2) the "owners" and/or "operators" of portions of the Site at the time of disposal of hazardous substances at the Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2);

e. The presence of hazardous substances at the Site or the past, and present or potential migration of hazardous substances currently located at or emanating from the Site, constitute actual and/or threatened "releases" of hazardous substances from the facility into the "environment" as defined by Sections 101(8) and (22) of CERCLA, 42 U.S.C. §§ 9601(8) and (22).

f. The actions required by this Order are necessary to protect the public health, welfare, or the environment, and are not inconsistent with the National Contingency Plan ("NCP") and CERCLA.

g. Respondents are qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C.§ 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondents comply with the terms of this Order.

VI. ORDER

Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, it is hereby ordered and agreed that each Respondent shall comply with the following provisions, including but not limited to all attachments to this Order, and all documents incorporated by reference into this Order, and perform the following actions:

1. Designation of Contractors, Project Coordinator and Remedial Project Manager

10. All Work performed under this Order shall be under the direction and supervision of qualified personnel. Within 30 days of the effective date of this Order, and before the work outlined below begins, the Respondents shall notify U.S. EPA and IEPA in writing of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants and laboratories to be used in carrying out such work. With respect to any proposed contractor, the Respondents shall demonstrate that the proposed contractor has a quality system which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by U.S. EPA. U.S. EPA retains the right to disapprove of the persons undertaking the work for Respondents. If U.S. EPA disapproves in writing a selected contractor, subcontractor, consultant or laboratory, Respondents shall retain replacement(s) and shall notify U.S. EPA and IEPA of the identity and qualifications of the replacement(s) within 14 days of the written notice. If U.S. EPA subsequently disapproves of the replacement(s), U.S. EPA reserves the right to terminate this

Order and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondents. During the course of the RI/FS, Respondents shall notify U.S. EPA and IEPA in writing of any changes or additions in the contractors, subcontractors, consultants or laboratories used to carry out such work, providing their names, titles, and qualifications. U.S. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.

11. Within 10 calendar days after the effective date of this Order, the Respondents shall designate a Project Coordinator who shall be responsible for administration of all the Respondents' actions required by the Order. Respondents shall submit the designated coordinator's name, address, telephone number, and qualifications to U.S. EPA and IEPA. U.S. EPA retains the right to disapprove of any Project Coordinator named by the Respondents. If U.S. EPA disapproves a selected Project Coordinator, Respondents shall retain a different Project Coordinator within 14 calendar days following U.S. EPA's disapproval and shall notify U.S. EPA and IEPA of that person's name and qualifications within 14 calendar days of U.S. EPA's disapproval. Receipt by Respondents' Project Coordinator of any notice or communication from U.S. EPA relating to this Order shall constitute receipt by all Respondents.

12. The U.S. EPA has designated Ross delRosario of the Remedial Response Branch, Region 5, as its Remedial Project Manager ("RPM"). Respondents shall direct all submissions required by this Order to the RPM along with the required copies in accordance with Section XX (Submittals/Correspondence) in accordance with the approved schedule under this Order. All Respondents are encouraged to make their submissions to U.S. EPA on recycled paper (which includes significant post-consumer waste paper content where possible) and using two-sided copies. Upon request by U.S. EPA, Respondents shall submit in electronic form all portions of RI and FS Reports, and any report or other deliverable Respondents are required to submit pursuant to provisions of this Order, including the SOW.

13. U.S. EPA and Respondents shall have the right, subject to the provisions of this section, to change their designated RPM or Project Coordinator. U.S. EPA shall notify the Respondents, and Respondents shall notify U.S. EPA, as early as possible before such a change is made, but in no case less than 24 hours before such a change. The initial notification may be made orally but it shall be promptly followed by a written notice within 4 calendar days of oral notification.

2. Work to Be Performed

14. Respondents shall develop and submit to U.S. EPA and IEPA an RI report, an FS report, and all other deliverables in accordance with the attached Statement of Work ("SOW"). The SOW is incorporated into and made an enforceable part of this Order. All deliverables shall be prepared in accordance with the provisions of this Order, the SOW, CERCLA, the NCP, U.S. EPA guidance related to remedial investigations and feasibility studies including, but not limited to, the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (OSWER Directive # 9355.3-01), "Guidance for Data Useability in Risk Assessment" (OSWER Directive #9285.7-05), Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part A), Interim Final (EPA-540-1-89-002), OSWER Directive 9285.7-01A, December 1, 1989; and Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments), Interim, (EPA 540-R-97-033), OSWER Directive 9285.7-01D, January 1998, guidances referenced in the SOW, and any RI/FS related guidance subsequently issued by U.S. EPA. In the RI and FS Reports, Respondents shall address the factors required to be taken into account in Section 121 of CERCLA, 42 U.S.C. § 9621, and Section 300.430 of the NCP, 40 C.F.R. § 300.430.

15. This RI/FS is limited to the industrial park portion of the Site. All other areas of the Site and all areas where hazardous substances, pollutants or contaminants from the Site have migrated or have been come to be located, will be addressed in a subsequent RI/FS process.

16. The RI shall characterize the geology and hydrogeology of the Site, determine the nature and extent of hazardous substances, pollutants or contaminants at or from the Site, and characterize all ecological zones including terrestrial, riparian, wetlands, aquatic/marine, and transitional. Respondents shall prepare, for inclusion with the RI Report, a determination of the nature and extent of the current and potential threat to the public health or welfare or the environment posed by the release or threatened release of any hazardous substances, pollutants, or contaminants at or from the Site, including a "Human Health Risk Assessment" and "Ecological Risk Assessment".

17. In the FS Report, Respondents shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action that protect human health and the environment by recycling waste or by eliminating, reducing and/or controlling risks posed through each pathway at the Site. In the FS Report,

the Respondents shall evaluate a range of alternatives including but not limited to those alternatives described in 40 C.F.R. § 300.430(e) and remedial alternatives that utilize permanent solutions and alternative treatment technologies or resource recovery technologies. The FS Reports shall include a detailed analysis of individual alternatives against each of the nine evaluation criteria in 40 C.F.R. § 300.430(e)(9)(iii) and a comparative analysis that focuses upon the relative performance of each alternative against the nine criteria in 40 C.F.R. § 300.430(e)(9)(iii).

18. Respondents shall submit to U.S. EPA and Illinois EPA copies of all plans, reports, submittals and other deliverables required under this Order, the SOW and the RI/FS Planning Documents in accordance with the approved schedule for review and approval pursuant to Section VI.2.6 of this Order (U.S. EPA Approval of Plans and Other Submissions). Upon request by U.S. EPA, Respondents shall submit in electronic form all portions of RI and FS Reports, and any report or other deliverable Respondents are required to submit pursuant to provisions of this Order, including the SOW. Upon approval by U.S. EPA, all deliverables under this Order, including the SOW, shall be incorporated into and become enforceable under this Order.

19. The Work conducted under this Order is subject to approval by U.S. EPA (in consultation with IEPA) and shall provide all appropriate and necessary information to assess site conditions and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP").

2.1 <u>RI/FS Work Plan</u>

20. Within 90 calendar days of the effective date of this Order, the Respondents shall submit to U.S. EPA for review and approval (with a copy to IEPA) a preliminary planning report as described in the SOW. Within 30 days after U.S. EPA approval of the preliminary planning report, Respondents shall submit for review and approval a complete RI/FS work plan that is consistent with this Order and the SOW.

21. Upon approval by U.S. EPA (in consultation with IEPA), Respondents shall implement all activities required by the RI/FS Work Plan in accordance with the approved schedules. Respondents shall not commence or undertake any sampling activities either on or off-Site without prior U.S. EPA approval.

2.1.1 Health and Safety Plan

22. As part of the RI/FS work plan, the Respondents shall submit for U.S. EPA review and comment (in consultation with IEPA) a plan that ensures the protection of the public health and safety during performance of work under this Order. The plan shall comply with applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 CFR Part 1910 and shall be prepared in accordance with U.S. EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992 or subsequently issued guidance). If U.S. EPA determines it is appropriate, the plan shall also include contingency planning. Respondents shall incorporate all changes to the plan recommended by U.S. EPA, and implement the plan during the pendency of the RI/FS.

2.1.2 Quality Assurance and Sampling

23. As part of the RI/FS work plan, the Respondents shall submit to U.S. EPA for approval (with a copy to IEPA) a sampling and analysis plan. This plan shall consist of a field sampling plan and a quality assurance project plan as described in the SOW and U.S. EPA guidances. The Respondents shall ensure that all sampling and analyses performed pursuant to this Order conforms to U.S. EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures.

24. Upon approval by U.S. EPA (in consultation with IEPA), Respondents shall implement the sampling and analysis plan.

25. Upon request by U.S. EPA, Respondents shall have such a laboratory analyze samples submitted by U.S. EPA for quality assurance monitoring. Respondents shall provide to U.S. EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis. Respondents shall also ensure provision of analytical tracking information consistent with, at a minimum, OSWER Directive No. 9240.0-2B, "Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites."

26. Upon request by U.S. EPA, Respondents shall allow U.S. EPA, IEPA, or their authorized representatives to take split and/or duplicate samples of any samples collected by Respondents or their contractors or agents while performing work under this Order. Respondents shall notify U.S. EPA and IEPA not less than 14 calendar days in advance of any sample collection activity. U.S. EPA and IEPA shall have the right to take any additional samples that they deem necessary.

2.2 RI Report

27. The RI Report will be developed in two primary phases: the Site Characterization Technical Memorandum and the Risk Assessment Technical Memorandum.

2.2.1 Site Characterization Technical Memorandum

28. Respondents shall submit to U.S. EPA for approval (with a copy to IEPA) a Site Characterization Technical Memorandum, in accordance with the schedule contained in the SOW. The Site Characterization Technical Memorandum shall present the results of the site characterization activities as described in the SOW.

2.2.2 Risk Assessment Technical Memorandum

29. Respondents shall submit to U.S. EPA for approval (with a copy to IEPA) a Risk Assessment Technical Memorandum, in accordance with the schedule contained in the SOW. The Risk Assessment Technical Memorandum shall evaluate both ecological risks and human health risks and shall present the results of the Risk Assessment activities as described in the SOW.

2.2.3 Final RI Report

30. Within 30 calendar days after approval of the Risk Assessment Technical Memorandum, the Respondents shall submit to U.S. EPA for approval (with a copy to IEPA) a draft RI Report that is consistent with this Order and the SOW.

31. The draft RI report and all revisions thereto shall include the following certification signed by a person who supervised or directed the preparation of that report:

> Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this Report, the information submitted is true, accurate, and complete.

2.2.4 Interim Actions

32. In developing the RI, to the extent possible, Respondents shall also identify and evaluate potential interim response activities that may be implemented to reduce or eliminate human exposures to contamination at or from the industrial portion of the Site prior to completion of the RI. Such response activities

shall be discussed in the Phase II Technical Memorandum, and Respondents may propose to implement such activities pursuant to section VI.2.5 of this Order.

2.3 FS Report

33. Respondents shall submit to U.S. EPA for approval (with a copy to IEPA) a draft FS Report that is consistent with this Order and the SOW. The FS Report will be developed in three primary phases: the Remedial Action Objectives Technical Memorandum, the Alternatives Screening Technical Memorandum, and the Comparative Analysis of Alternatives Technical Memorandum.

2.3.1 Remedial Action Objectives Technical Memorandum

34. Respondents shall submit to U.S. EPA for approval (with a copy to IEPA) a Remedial Action Objectives Technical Memorandum, in accordance with the schedule contained in the SOW. Based on the results of the approved RI Report, the Remedial Action Objectives Technical Memorandum shall identify the constituents and media of concern, the actual and potential exposure pathways and receptors, and the appropriate cleanup objectives for the identified media and pathways.

2.3.2 Alternatives Screening Technical Memorandum

35. Respondents shall submit to U.S. EPA for approval (with a copy to IEPA) an Alternatives Screening Technical Memorandum, in accordance with the schedule contained in the SOW. The Alternatives Screening Technical Memorandum shall develop an appropriate range of waste management options that will be evaluated through the development and screening of alternatives, as provided in the SOW and RI/FS Work Plan. Respondents shall summarize the development and screening of remedial alternatives, and include an alternatives array document as described in the SOW.

2.3.3 Comparative Analysis of Alternatives Technical Memorandum

36. Respondents shall submit to U.S. EPA for approval (with a copy to IEPA) a Comparative Analysis of Alternatives Technical Memorandum, in accordance with the schedule contained in the SOW. The Comparative Analysis of Alternatives Technical Memorandum shall summarize the results of the comparative analysis performed between the remedial alternatives and present the results of all treatability studies performed, as described in the SOW.

2.3.4 Final FS Report

37. Within 21 calendar days after approval of the Comparative Analysis of Alternatives Technical Memorandum, the Respondents shall submit to U.S. EPA for approval (with a copy to IEPA) a draft FS Report that is consistent with this Order and the SOW.

38. The draft FS report and all revisions thereto shall include the following certification signed by a person who supervised or directed the preparation of that report:

> Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this Report, the information submitted is true, accurate, and complete.

39. Respondents shall not commence or undertake any remedial actions at the Site without prior U.S. EPA approval.

2.4 Reporting

40. Respondents shall submit a monthly written progress report to U.S. EPA and IEPA concerning actions undertaken pursuant to this Order, beginning 30 calendar days after the effective date of this Order, until termination of this Order, unless otherwise directed in writing by the RPM. These reports shall: (1) describe all significant developments during the preceding period, including the work performed and any problems encountered; (2) provide all analytical data received during the reporting period; (3) describe all developments anticipated during the next reporting period, including a schedule of work to be performed; and (4) describe all anticipated problems and planned resolutions of past or anticipated problems.

41. Respondents shall make presentations at, and participate in, meetings at the request of U.S. EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at U.S. EPA's discretion (in consultation with IEPA and the Respondents).

42. Any Respondent that owns any portion of the Site shall, at least 20 calendar days prior to the conveyance of any interest in real property at the Site, give written notice of this Order to the transferee and written notice of the proposed conveyance to U.S. EPA and IEPA. The notice to U.S. EPA and IEPA shall include the name and address of the transferee. The party conveying such

an interest shall require that the transferee will provide access as described in Section VI.3. (Access to Property and Information).

2.5 Additional Work

43. In the event that the U.S. EPA or the Respondents determine that additional work is necessary to accomplish the objectives of the RI/FS, notification of such additional work shall be provided to the other parties in writing. Any additional work which Respondents determine to be necessary shall be subject to U.S. EPA's written approval (in consultation with IEPA) prior to commencement of the additional work. Respondents shall complete, in accordance with standards, specifications, and schedules U.S. EPA has approved, any additional work Respondents have proposed, and which U.S. EPA has approved in writing or that U.S. EPA has determined to be necessary, and has provided written notice of pursuant to this paragraph. Subject to Dispute Resolution as provided in Section IX, Respondents shall implement the additional tasks that U.S. EPA determines are necessary.

2.6 U.S. EPA Approval of Plans and other Submissions

44. After review of any plan, report or other item that is required to be submitted for approval pursuant to this Order, including the SOW, U.S. EPA (in consultation with IEPA) shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondents modify the submission; or (e) any combination of the above. However, U.S. EPA shall not modify a submission without first providing Respondents at least one notice of deficiency and an opportunity to cure within 14 days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

45. In the event of approval, approval upon conditions, or modification by U.S. EPA, pursuant to Subparagraph 44(a), (b), (c) or (e), Respondents shall proceed to take any action required by the plan, report or other item, as approved or modified by U.S. EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section IX with respect to the modifications or conditions made by U.S. EPA. Following U.S. EPA approval or modification of a submittal or portion thereof, Respondents shall not thereafter alter or amend such submittal or portion thereof unless directed by U.S. EPA. In the event that U.S. EPA modifies the submission to cure the deficiencies pursuant

to Subparagraph 44(c) and the submission had a material defect, U.S. EPA retains the right to seek stipulated penalties, as provided in Section XI. U.S. EPA also retains the right to perform its own studies, complete the RI/FS (or any portion of the RI/FS), and seek reimbursement from Respondents for its costs; and/or seek any other appropriate relief.

46. Resubmission of Plans.

a. Upon receipt of a notice of disapproval or required modifications, Respondents shall, within 21 days or such longer time as specified by U.S. EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Any stipulated penalties applicable to the submission, as provided in Section XI, shall accrue during the 21-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 47 and 48.

b. Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed, at the direction of U.S. EPA, to take any action required by any non-deficient portion of the relevant submission. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for stipulated penalties under Section XI.

c. For all remaining deliverables not enumerated above in Sections 2.1-2.3 and 2.5, Respondents shall proceed with all subsequent tasks, activities and deliverables without awaiting U.S. EPA approval on the submitted deliverable. U.S. EPA reserves the right to stop Respondents from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS.

47. If U.S. EPA disapproves a resubmitted plan, report or other item, or portion thereof, U.S. EPA may direct Respondents to correct the deficiencies and specify the date by which the corrections must be submitted. U.S. EPA also retains the right to modify or develop the plan, report or other item. Respondents shall implement any such plan, report, or item as corrected, modified or developed by U.S. EPA, subject only to their right to invoke the dispute resolution procedures set forth in Section IX. In the event of U.S. EPA disapproval of a revised submittal, Respondents may be deemed in violation of this Order. If Respondents are deemed in violation of this Order, U.S. EPA retains the right to seek stipulated or statutory penalties; perform its own studies, complete the RI/FS (or any portion of the RI/FS) under CERCLA and the NCP, and seek reimbursement from the

Respondents for its costs; to terminate this Order; and/or seek any other appropriate relief.

48. If upon resubmission, a plan, report, or item is disapproved or modified by U.S. EPA due to a material defect, Respondents shall be deemed to have failed to submit such plan, report, or item timely and adequately unless Respondents invoke the dispute resolution procedures in accordance with Section IX and U.S. EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by U.S. EPA or superceded by an agreement reached pursuant to that Section. The provisions of Section IX and XI shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If U.S. EPA's disapproval or modification is not otherwise revoked, substantially modified or superceded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section IX, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XI.

49. In the event that U.S. EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondents shall incorporate and integrate information supplied by U.S. EPA into the final reports.

50. All plans, reports, and other items submitted to U.S. EPA under this Order shall, upon approval or modification by U.S. EPA, be incorporated into and enforceable under this Order. In the event U.S. EPA approves or modifies a portion of a plan, report, or other item submitted to U.S. EPA under this Order, the approved or modified portion shall be incorporated into and enforceable under this Order.

51. Neither failure of U.S. EPA to expressly approve or disapprove of Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by U.S. EPA. Whether or not U.S. EPA gives express approval for Respondents' deliverables, Respondents are responsible for preparing deliverables acceptable to U.S. EPA.

2.7 <u>Community Relations and Technical Assistance Plan</u>

52. U.S. EPA will prepare a Community Relations Plan, in consultation with IEPA and in accordance with U.S. EPA guidance and the NCP. Respondents shall provide information and conduct other activities as requested by U.S. EPA to support community relations programs. If a community group requests funding for technical assistance, within 30 days after notification by

U.S. EPA of such a request, Respondents shall prepare a Technical Assistance Plan ("TAP"). The Technical Assistance Plan shall provide for funding and administration of up to $50,000 in funds provided by Respondents to be used by selected qualified representatives of the community to hire independent technical advisors during the Work conducted pursuant to this Consent Order. The TAP shall state that Respondents will provide and administer any additional amounts needed if U.S. EPA, in its discretion, determines that the selected community group has demonstrated such a need (under the standards provided in 40 C.F.R. §35.4065) prior to U.S. EPA's issuance of the ROD based on the RI/FS conducted pursuant to this Order. If U.S. EPA disapproves of or requires revisions to the TAP, in whole or in part, Respondents shall amend and submit to U.S. EPA a revised TAP that is responsive to U.S. EPA's comments, within 21 days of receiving EPA's comments. TAP funds may not be used to support litigation activities and the Citizen's Advisory Group for the Site is not eligible to receive funding under the TAP.

3. Access to Property and Information

53. Respondents shall provide or obtain access to the Site and off-site areas to which access is necessary to implement this Order, and shall provide access to all records and documentation in their possession or control, or that of their contractors or agents, related to the conditions at the Site and the actions conducted pursuant to this Order. Such access shall be provided to U.S. EPA, IEPA, and their employees, contractors, agents, consultants, designees, representatives. These individuals shall be permitted to move freely at the Site and appropriate off-site areas to which Respondents have access in order to conduct actions which U.S. EPA determines to be necessary. Respondents shall submit to U.S. EPA and IEPA, upon receipt, the results of all sampling or tests and all other data generated by Respondents or their contractor(s), or on the Respondents' behalf during implementation of this Order.

54. Where work or action under this Order is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain all necessary access agreements within 30 calendar days after the effective date of this Order, or as otherwise specified in writing by the RPM. Respondents shall notify U.S. EPA within 4 calendar days if, after using their best efforts, they are unable to obtain such agreements. Respondents shall describe in writing their efforts to obtain access. If Respondents cannot obtain access agreements, U.S. EPA may, in its discretion, obtain access for Respondents, perform those tasks or activities with U.S. EPA contractors, or

terminate the Order. In the event that U.S. EPA performs those tasks or activities with U.S. EPA contractors and does not terminate the Order, Respondents shall perform all other activities not requiring access to that property, and shall reimburse U.S. EPA for all costs incurred in performing such activities. Respondents shall integrate the results of any such tasks undertaken by U.S. EPA into its reports and deliverables.

55. Respondents shall provide to U.S. EPA and the State, upon request, copies of all non-privileged documents and information within their possession or control or that of their agents relating to the Work. Respondents shall also make available to U.S. EPA and the State, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work. Prior to requesting any such access to individuals, U.S. EPA shall make reasonable efforts to secure such information from Respondents' Project Coordinator.

56. Respondents may assert business confidentiality claims covering part or all of the documents or information submitted to U.S. EPA and the State under this Order to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by U.S. EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to U.S. EPA and the State, or if U.S. EPA has notified Respondents that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondents.

57. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If a Respondent asserts such a privilege in lieu of providing documents, it shall provide U.S. EPA with the following information, to the extent that such information is not covered by the applicable privilege: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information

required to be submitted pursuant to this Order shall be withheld on the grounds that they are privileged.

4. Record Retention, Documentation, Availability of Information

58. Until six years after Respondents' receipt of U.S. EPA's notification pursuant to Section XIX, each Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until six years after Respondents' receipt of U.S. EPA's notification pursuant to Section XIX, Respondents shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work. Any information that Respondents are required to provide or maintain pursuant to this Order is not subject to the Paperwork Reduction Act of 1995, 44 U.S.C. §3501 et seq.

59. At the conclusion of this document retention period, Respondents shall notify U.S. EPA and IEPA at least 90 days prior to the destruction of any such records or documents, and, upon request by U.S. EPA or IEPA, Respondents shall deliver any such records or documents to U.S. EPA or the State. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondents assert such a privilege, they shall provide U.S. EPA or the State with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege asserted by Respondents. However, no documents, reports or other information required to be submitted pursuant to this Order shall be withheld on the grounds that they are privileged.

60. Each Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by U.S. EPA or the filing of suit against it regarding the Site and that it has

fully complied with any and all U.S. EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

5. Off-Site Shipments

61. a. Respondents shall, prior to any off-site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to U.S. EPA's Designated Project Coordinator. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

b. Respondents shall include in the written notification the following information: (1) the name and location of the facility to which the Waste Material is to be shipped: (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

c. The identity of the receiving facility and state will be determined by Respondents following the award of the contract for the remedial investigation and feasibility study. Respondents shall provide the information required by Subparagraph 61.b and 38.d as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

d. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondents shall obtain U.S. EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

6. Compliance With Other Laws

62. Respondents shall perform all activities required pursuant to this Order in accordance with all the requirements of all federal

and state laws and regulations. U.S. EPA has determined that the activities required by this Order are consistent with the NCP.

63. Except as provided in Section 121(e) of CERCLA and the NCP, no permit shall be required for any portion of the activities conducted entirely on-site. Where any portion of the activities is to be conducted off-site and requires a federal or state permit or approval, the Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals.

64. This Order is not, and shall not be construed to be, a permit issued pursuant to any federal or state statue or regulation.

7. Emergency Response and Notification of Releases

65. If any incident, or change in Site conditions, during the activities conducted pursuant to this Order causes or threatens to cause an additional release of hazardous substances from the Site or an endangerment to the public health, welfare, or the environment, the Respondents shall immediately take all appropriate action to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the RPM or, in the event of his unavailability, shall notify the Regional Duty Officer, Emergency Response Branch, Region 5 at (312) 353-2318, of the incident or Site conditions. If Respondents fail to respond, U.S. EPA may respond to the release or endangerment and reserve the right to recover costs associated with that response.

66. Respondents shall submit a written report to U.S. EPA and IEPA within 10 calendar days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. Respondents shall also comply with any other notification requirements, including those in CERCLA Section 103, 42 U.S.C. § 9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act, 42 U.S.C. § 11004.

VII. AUTHORITY OF THE U.S. EPA REMEDIAL PROJECT MANAGER

67. The RPM shall be responsible for overseeing the implementation of this Order. The RPM shall have the authority vested in an RPM and an On-Scene Coordinator by the NCP, including the authority to halt, conduct, or direct any activities required by this Order, or to direct any other response action undertaken

by U.S. EPA or Respondents at the Site. Absence of the RPM from the Site shall not be cause for stoppage of work unless specifically directed by the RPM.

VIII. REIMBURSEMENT OF COSTS

68. Respondents shall pay all Oversight Costs of the United States related to the Site that are not inconsistent with the NCP. U.S. EPA will send Respondents a bill for Oversight Costs on an annual basis. The bill shall consist of an Itemized Costs Summary. "Oversight Costs" are all costs paid by U.S. EPA after the effective date of this Order relating to this Order, including, but not limited to direct and indirect costs related to overseeing work performed under this Order, and reviewing or developing plans, reports and other items pursuant to this Order.

69. Respondents shall, within 45 calendar days of receipt of a bill from U.S. EPA, remit a cashier's or certified check for the amount of the bill made payable to the "Hazardous Substance Superfund," to the following address:

U.S. Environmental Protection Agency
Program Accounting and Analysis Section
P.O. Box 70753
Chicago, Illinois 60673

Respondents shall simultaneously transmit a copy of the check to the Director, Superfund Division, U.S. EPA Region 5, 77 West Jackson Blvd., Chicago, Illinois, 60604-3590. Payments shall be designated as "Response Costs - Ellsworth Industrial Park Site" and shall reference the payor(')s(') name and address, the U.S. EPA site identification number B52A, and the docket number of this Order.

70. The total amount to be paid by Respondents under this Section shall be deposited in the Ellsworth Industrial Park Special Account within the U.S. EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by U.S. EPA to the U.S. EPA Hazardous Substance Superfund.

71. In the event that any payment is not made within the deadlines described above, Respondents shall pay interest on the unpaid balance. Interest is established at the rate specified in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). The interest shall begin to accrue on the date of the Respondents' receipt of the bill (or for Past Response Costs, on the effective date of this Order). Interest shall accrue at the rate specified through the

date of the payment. Payments of interest made under this paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section.

72. If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondents shall pay the full amount of the uncontested costs into the Hazardous Substance Fund as specified above on or before the due date. Within the same time period, Respondents shall pay the full amount of the contested costs into an interest-bearing escrow account. Respondents shall simultaneously transmit a copy of both checks to the RPM. Respondents shall ensure that the prevailing party or parties in the dispute shall receive the amount upon which they prevailed from the escrow funds plus interest within 20 calendar days after the dispute is resolved.

IX. DISPUTE RESOLUTION

73. Unless otherwise expressly provided for in this Order, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Order. The Parties shall attempt to resolve any disagreements concerning this Order expeditiously and informally. Any agreement reached by the parties pursuant to this Section shall be in writing and shall, upon signature by both parties, be incorporated into and become an enforceable part of this Order.

74. If the Respondents object to any U.S. EPA action taken pursuant to this Order, including billings for response costs, the Respondents shall notify U.S. EPA in writing of their objection(s) within 10 calendar days of such action, unless the objection(s) have been informally resolved. This written notice shall include a statement of the issues in dispute, the relevant facts upon which the dispute is based, all factual data, analysis or opinion supporting Respondents' position, and all supporting documentation on which the Respondents rely. U.S. EPA shall submit its Statement of Position, including supporting documentation, within 15 business days of receipt of the written notice of dispute. In the event that these time periods for exchange of written documents may cause a delay in the Work, they shall be shortened upon, and in accordance with, notice by U.S. EPA.

75. U.S. EPA and Respondents shall within 15 calendar days of U.S. EPA's receipt of the Respondents' Statement of Position, attempt to resolve the dispute through formal negotiations

("Negotiation Period"). The Negotiation Period of 15 calendar days may be extended at the sole discretion of U.S. EPA. U.S. EPA's decision regarding an extension of the Negotiation Period shall not constitute a U.S. EPA action subject to dispute resolution or a final Agency action giving rise to judicial review.

76. Any agreement reached by the parties pursuant to this Section shall be in writing, signed by all parties, and shall upon the signature by the parties be incorporated into and become an enforceable element of this Order.

77. U.S. EPA shall maintain an administrative record of any formal dispute under this Section. The record shall include the written notification of such dispute, and the Statement of Position served pursuant to paragraph 74. If the parties are unable to reach an agreement within the Negotiation Period, upon review of the administrative record, the Director of the Superfund Division, U.S. EPA Region 5, shall resolve the dispute consistent with the NCP and the terms of this Order. The decision of U.S. EPA shall be incorporated into and become an enforceable element of this Order upon Respondents' receipt of the decision regarding the dispute.

78. Respondents' obligations under this Order shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with U.S. EPA's decision, whichever occurs. No U.S. EPA decision made pursuant to this Section shall constitute a final Agency action giving rise to judicial review.

X. FORCE MAJEURE

79. Respondents agree to perform all requirements under this Order within the time limits established under this Order, unless the performance is delayed or prevented by a force majeure. For purposes of this Order, a force majeure is defined as any event arising from causes beyond the control of Respondents, or of any entity controlled by Respondents, including but not limited to their contractors and subcontractors, which delays or prevents performance of any obligation under this Order despite Respondents' best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the work, increased cost of performance, or normal weather events.

80. If any event occurs or has occurred that may delay the performance of any Work obligation under this Order, whether or not caused by a force majeure event, Respondents shall notify

U.S. EPA orally within 24 hours of when Respondents first knew that the event might cause a delay. Within 7 business days thereafter, Respondents shall provide to U.S. EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondents' rationale for attributing such delay to a force majeure event if they intend to assert such a claim; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the notice provision of this Section shall be grounds for U.S. EPA to deny Respondents an extension of time for performance. Respondents shall have the burden of demonstrating by a preponderance of the evidence that the event is a force majeure, that the delay is warranted under the circumstances, and that best efforts were exercised to avoid and mitigate the effects of the delay to the satisfaction of U.S. EPA.

81. If U.S. EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the Work obligations under this Order that are affected by the force majeure event will be extended by U.S. EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the Work obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other Work obligation that is not so affected. If U.S. EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, U.S. EPA will notify Respondents in writing of its decision. If U.S. EPA agrees that the delay is attributable to a force majeure event, U.S. EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

XI. STIPULATED AND STATUTORY PENALTIES

82. Respondents shall be liable to U.S. EPA for stipulated penalties in the amounts set forth below for failure to comply with the Work requirements of this Order specified below, unless excused under Section X, or modified by written agreement of the parties under Section XVIII:

Deliverable/Activity	Penalty For Days 1-7	Penalty For > 7 Days
Failure to Submit a Draft work plan or RI or FS Report	$500/Day	$1250/Day

Failure to Submit a revised work plan or RI or FS Report	$500/Day	$1250/Day
Failure to Submit a Data Report or Technical Memorandum	$500/Day	$1,000/Day
Late Submittal of Progress Reports or Other Miscellaneous Reports/Submittals	$250/Day	$ 500/Day
Failure to Meet any Scheduled Deadline in the Order	$250/Day	$ 500/Day

83. Unless the failure to perform is excused or the timing for performance is otherwise modified by the parties, all penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: 1) with respect to a deficient submission under Section VI.2 (Work to be Performed), during the period, if any, beginning on the 31st day after U.S. EPA's receipt of such submission until the date that U.S. EPA notifies Respondents of any deficiency; and 2) with respect to a decision by the Director of the Superfund Division, U.S. EPA Region 5, under Section IX (Dispute Resolution), during the period, if any, beginning on the 21st day after the U.S. EPA submits its Statement of Position until the date that the Director of the Superfund Division, U.S. EPA Region 5, issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Order.

84. Following U.S. EPA's determination that Respondents have failed to comply with a requirement of this Order, U.S. EPA may give Respondents written notification of the failure and describe the noncompliance. U.S. EPA may send Respondents a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding paragraphs regardless of whether U.S. EPA has notified Respondents of a violation. Penalties accrue and are assessed per violation per day.

85. All penalties accruing under this Section shall be due and payable to U.S. EPA within 30 days of Respondents' receipt from U.S. EPA of a demand for payment of the penalties, unless

Respondents invoke the dispute resolution procedures under Section XIV (Dispute Resolution). All payments to U.S. EPA under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," to the following address:

U.S. Environmental Protection Agency
Program Accounting & Analysis Section
P.O. Box 70753
Chicago, Illinois 60673

Respondents shall simultaneously transmit a copy of the check to the Director, Superfund Division, U.S. EPA Region 5, 77 West Jackson Blvd., Chicago, Illinois, 60604-3590. Payments shall be designated as "Stipulated Penalties - Ellsworth Industrial Park Site" and shall reference the payers' name and address, the U.S. EPA site identification number (05B52A), and the docket number of this Order.

86. The payment of penalties shall not alter in any way Respondents' obligation to complete performance of the Work required under this Order.

87. Penalties shall continue to accrue during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of U.S. EPA's decision determining that payment is due.

88. If Respondents fail to pay stipulated penalties when due, U.S. EPA may institute proceedings to collect the penalties, as well as Interest. Respondents shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to paragraph 84. Nothing in this Order shall be construed as prohibiting, altering, or in any way limiting the ability of U.S. EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Order, including, but not limited to, penalties pursuant to Sections 106(b) and 122(*l*) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(*l*), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that, U.S. EPA shall not seek civil penalties pursuant to Section 106(b) or 122(*l*) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of this Order. Should Respondents violate this Order or any portion hereof, U.S. EPA may carry out all or part of the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. §§ 9604. Notwithstanding any other provision of this Section, U.S. EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Order.

XII. RESERVATION OF RIGHTS

89. Except as specifically provided in this Order, nothing herein shall limit the power and authority of U.S. EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, contaminants, or oil or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent U.S. EPA from seeking legal or equitable relief to enforce the terms of this Order. U.S. EPA also reserves the right to take any other legal or equitable action as it deems appropriate and necessary, or to require the Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law. U.S. EPA reserves its rights in regard to claims, prior actions, orders, or agreements with Respondents. The covenant not to sue by U.S. EPA set forth in Section XIV does not pertain to any matters other than those expressly identified therein. The United States and U.S. EPA reserve, and this Agreement is without prejudice to, all rights against the Respondents with respect to all other matters, including but not limited to:

a. liability for failure of Respondents to meet a requirement of this Order by Consent;

b. liability for costs incurred or to be incurred that are not Oversight Costs as defined in Section VII of this Order;

c. liability for injunctive relief or administrative order enforcement under Section 106 of CERCLA, 42 U.S.C. § 9606, excluding work performed under the terms of this Order;

d. criminal liability;

e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments.

f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

XIII. OTHER CLAIMS

90. By issuance of this Order, the United States and U.S. EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents. The United

States or U.S. EPA shall not be a party or be held out as a party to any contract entered into by the Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out activities pursuant to this Order.

91. Except as expressly provided in Section XIV (Covenant Not To Sue), nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against the Respondents or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or the common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106(a) or 107(a) of CERCLA, 42 U.S.C. §§ 9606(a), 9607(a).

92. No action or decision by U.S. EPA pursuant to this Order shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

93. For the purposes of Section 113(g)(1) of CERCLA, the parties agree that, upon issuance of this Administrative Order on Consent for performance of an RI/FS at the Site, remedial action under CERCLA shall be deemed to be scheduled and an action for damages (as defined in 42 U.S.C. § 9601(6)) must be commenced within 3 years after the completion of the remedial action.

XIV. COVENANT NOT TO SUE BY U.S. EPA

94. Except as reserved in Section XII of this Order, in consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Order, and except as otherwise specifically provided in this Order, U.S. EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for performance of the Work and for recovery of Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondents of all obligations under this Order, including, but not limited to, payment of Oversight Costs pursuant to Section VIII. This covenant not to sue extends only to Respondents and does not extend to any other person.

XV. COVENANT NOT TO SUE BY RESPONDENTS

95. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Oversight Costs, or this Order, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of the Work or arising out of the response actions for which the Oversight Costs have or will be incurred, including any claim under the United States Constitution, the Illinois Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or payment of Past Response Costs or Future Response Costs.

96. These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 89 (b), (c), and (e) - (g), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

97. The Respondents reserve, and this Order is without prejudice to, their potential claims against the United States for intentional or willful torts committed by any employee of the United States while acting within the scope of their office or employment, to the extent such claims are otherwise allowed by any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA. Respondents' reservation does not include any claim based on U.S. EPA's selection of response actions, or U.S. EPA's oversight or approval of the Work.

98. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R.§ 300.700(d).

99. Respondents agree not to seek judicial review of the final rule listing the Site on the NPL based on a claim that changed site conditions that resulted from the performance of response actions under this Order or previous Orders related to the Site in any way affected the basis for listing the Site.

XVI. CONTRIBUTION PROTECTION

100. With regard to claims for contribution against Respondents for matters addressed in this Order, the Parties hereto agree that

the Respondents are entitled to protection from contribution actions or claims to the extent provided by Section 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4) for "matters addressed" in this Order. The "matters addressed" in this Order are the performance of an RI/FS for the industrial portion of the Site. Except as expressly provided herein, nothing in this Order precludes the United States or Respondents from asserting any claims, causes of action, or demands against any persons not parties to this Order for indemnification, contribution, or cost recovery. Nothing in this Order precludes Respondents from asserting any claims, causes of action, or demands against any Respondents who fail to comply with this Order for any reason, or any action allowed by separate agreement among the Respondents regarding their participation in this Order.

XVII. INDEMNIFICATION

101. Respondents shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, in carrying out the Work pursuant to this Order. In addition, Respondents agree to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Order. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondents in carrying out activities pursuant to this Order. Neither Respondents nor any such contractor shall be considered an agent of the United States.

102. The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

103. Respondents waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or

arrangement between any one or more of Respondents and any person for performance of Work.

XVIII. MODIFICATIONS

104. Except as otherwise specified in Section VI.2. (Work To Be Performed), if any party believes modifications to any plan or schedule are necessary during the course of this project, they shall conduct informal discussions regarding such modifications with the other parties. Any agreed-upon modifications to any plan or schedule shall be memorialized in writing within 10 calendar days; however, the effective date of the modification shall be the date of the RPM's oral direction. Any other requirements of this Order may be modified in writing by mutual agreement of the parties. Any modification to this Order shall be incorporated into and made an enforceable part of this Order.

105. If Respondents seek permission to deviate from any approved plan or schedule, Respondents' Project Coordinator shall submit a written request to U.S. EPA for approval (in consultation with IEPA) outlining the proposed modification and its basis. Respondents may not proceed with the requested deviation until receiving oral or written approval from the RPM pursuant to paragraph 104.

106. No informal advice, guidance, suggestion, or comment by U.S. EPA regarding reports, plans, specifications, schedules, or any other writing submitted by the Respondents shall relieve Respondents of their obligations to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified.

XIX. NOTICE OF COMPLETION

107. When U.S. EPA determines (in consultation with IEPA) that all work, including the RI and FS Reports, has been fully performed in accordance with this Order, except for certain continuing obligations required by this Order (e.g., record retention, payment of costs), U.S. EPA will provide written notice to the Respondents. If U.S. EPA determines (in consultation with IEPA) that any such Work has not been completed in accordance with this Order, U.S. EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the RI/FS Planning Documents or other work plan if appropriate in order to correct such deficiencies. Respondents shall implement the modified and approved RI/FS Planning Documents or other approved work plan and shall submit the required deliverable(s) in accordance with the U.S. EPA notice. Failure by Respondents to implement the approved modified RI/FS Planning Documents or other work plan shall be a violation of this Order.

XX. SUBMITTALS/CORRESPONDENCE

108. Any notices, documents, information, reports, plans, approvals, disapprovals, or other correspondence required to be submitted from one party to another under this Order, shall be deemed submitted either when hand-delivered or as of the date of receipt by certified mail/return receipt requested, express mail, or facsimile in accordance with this section.

109. Correspondence and communications from U.S. EPA and IEPA shall be addressed to:

[insert names]

Three copies of all correspondence, communication, and submittals from Respondents shall be directed to the following, and additional copies to other individuals he may identify:

Ross delRosario
Remedial Project Manager
United States Environmental Protection Agency
77 West Jackson Blvd., Mailcode SR-6J
Chicago, Illinois 60604-3590
Phone (312) 886-7167
FAX (312) 353-5541
Email "delrosario.rosauro@epa.gov"

Two copies of all correspondence, communication, and submittals from Respondents shall be directed to the following, and additional copies to other individuals he may identify:

Fred W. Nika, Jr.
Remedial Project Manager
Illinois Environmental Protection Agency
Division of Remediation Management
1021 North Grand Avenue East
Springfield, Illinois 62702
Phone (217) 782-3983
FAX (217) 782-3258
E-mail "epa4217@epa.state.il.us"

One copy of all correspondence, communication, and submittals from Respondents shall be directed to:

Thomas Krueger
Associate Regional Counsel
U.S. EPA - Region 5

77 West Jackson Boulevard, C-14J
Chicago, Illinois 606064-3590
Phone (312) 886-0562
FAX (312) 886-0747
E-mail "krueger.thomas@epa.gov"

XXI. SEVERABILITY

110. If a court of competent jurisdiction issues an order that invalidates any provision of this Order or finds that Respondents have sufficient cause not to comply with one or more provisions of this Order, Respondents shall remain bound to comply with all provisions of this Order not invalidated or determined to be subject to a sufficient cause defense by the court's order.

XXII. FINANCIAL ASSURANCE AND INSURANCE

111. Respondents shall establish and maintain a financial instrument or trust account or other financial mechanism acceptable to U.S. EPA, funded sufficiently to perform the work and any other obligations required under this Order, including a margin for cost overruns.

112. Within 15 days after the effective date of this Order, Respondents shall fund the financial instrument or trust account sufficiently to perform the work required under this Order projected for the period beginning with the effective date of the Order through December 31, 2005. Beginning December 15, 2005, and on or before the 15th calendar day of each calendar year quarter thereafter, Respondents shall fund the financial instrument or trust account sufficiently to perform the work and other activities required under this Order projected for the succeeding calendar year quarter.

113. If at any time the net worth of the financial instrument or trust account is insufficient to perform the work and other obligations under the Order for the upcoming quarter, Respondents shall provide written notice to U.S. EPA within 7 days after the net worth of the financial instrument or trust account becomes insufficient. The written notice shall describe why the financial instrument or trust account is funded insufficiently and explain what actions have been or will be taken to fund the financial instrument or trust account adequately. Respondents' inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Order.

114. Respondents may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by U.S. EPA, provided that U.S. EPA determines that the new form of assurance meets the requirements of this Section.

115. Prior to commencement of any work under this Order, Respondents shall secure, and shall maintain in force for the duration of this Order, and for two years after the completion of all activities required by this Order, Comprehensive General Liability ("CGL") and automobile insurance, with limits of $2 million dollars, combined single limit, naming as insured the United States. The CGL insurance shall include Contractual Liability Insurance in the amount of $_____ per occurrence, and Umbrella Liability Insurance in the amount of $2 million per occurrence.

116. Respondents shall also secure, and maintain in force for the duration of this Order and for two years after the completion of all activities required by this Consent Order the following:

a. Professional Errors and Omissions Insurance in the amount of $1,000,000.00 per occurrence.

b. Pollution Liability Insurance in the amount of $1,000,000.00 per occurrence, covering as appropriate both general liability and professional liability arising from pollution conditions.

117. For the duration of this Order, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of employer's liability insurance and workmen's compensation insurance for all persons performing work on behalf of the Respondents, in furtherance of this Order.

118. If Respondents demonstrate by evidence satisfactory to U.S. EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then with respect to that contractor or subcontractor Respondents need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

119. Prior to commencement of any work under this Order, and annually thereafter on the anniversary of the effective date of this Order, Respondents shall provide to U.S. EPA certificates of such insurance and a copy of each insurance policy.

120. At least 7 days prior to commencing any work under this Order, Respondents shall certify to U.S. EPA that the required insurance has been obtained by that contractor.

XXIII. EFFECTIVE DATE AND COMPUTATION OF TIME

121. This Order shall be effective upon signature by the Director, Superfund Division, U.S. EPA Region 5. For the purposes

of this Order, the term "day" shall mean a calendar day. In computing any period of time under this Order, where the last day of the period would fall on a Saturday or Sunday, the period shall run until noon, Central Time of the following Monday.

IN THE MATTER OF:

ELLSWORTH INDUSTRIAL PARK SITE, DOWNERS GROVE, IL

SIGNATORIES

Each undersigned representative of a signatory to this Administrative Order on Consent certifies that he or she is fully authorized to enter into the terms and conditions of this Order and to bind such signatory, its directors, officers, employees, agents, successors and assigns, to this document.

Agreed this _____ day of _____, 2005.

By _____

By _____

By _____

IT IS SO ORDERED AND AGREED

BY:_____ DATE:_____

Richard C. Karl, Director
Superfund Division
United States Environmental Protection Agency
Region 5

ATTACHMENT A

To be developed

ATTACHMENT B

To be developed

ENCLOSURE E

STATEMENT OF WORK
FOR A REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
AT THE ELLSWORTH INDUSTRIAL PARK SITE
SOURCE AREA OPERABLE UNIT
IN THE VILLAGE OF DOWNERS GROVE, DuPAGE COUNTY, ILLINOIS

PURPOSE:

The purpose of this Statement of Work (SOW) is to set forth requirements for conducting a Remedial Investigation and Feasibility Study (RI/FS) at the industrial park portion of the Ellsworth Industrial Park Site (the "Site"). The RI/FS shall be limited to the area of the site designated as the Source Area (OU1). The RI shall evaluate the nature and extent of hazardous substances or contaminants at the industrial park or from past operations at the industrial park Source Area. The RI shall also assess the risk which these hazardous substances or contaminants may present for human health and the environment. The FS Report shall evaluate remedy alternatives for addressing the impact to human health and the environment from hazardous substances or contaminants at the Source Area. It is expected that this RI/FS can be expedited and streamlined due to existence of a substantial data set and knowledge gathered by the Illinois EPA (IEPA) and United States Environmental Protection Agency (USEPA) from site investigations, sampling surveys, and other field work performed since 1991. Given this situation and the desire to complete the work as soon as practicable, the RI/FS shall be performed using the Triad approach for conducting site investigations. A copy of the guidance on the Triad approach is enclosed (see *Technical and Regulatory Guidance for the Triad Approach: A New Paradigm for Environmental Project Management*, December 2003).

The RI/FS shall also be consistent with the relevant portions of the *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (USEPA, Office of Emergency and Remedial Response, October, 1988) and any other guidance that USEPA uses to conduct an RI/FS, as well as any additional requirements in the AOC.

All documents or deliverables required as part of this SOW shall be submitted to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA. Respondents shall furnish all personnel, materials, and services necessary for, or incidental to, performing the RI/FS for the Source Area operable unit, except as otherwise specified herein. USEPA, after reasonable opportunity for review and comment by IEPA, may:

1. Approve, in whole or in part, the submission;
2. Require revisions to the submission;
3. Modify the submission;
4. Disapprove, in whole or in part, the submission; or
5. Any combination of the above to conform with the requirements of the AOC, SOW, NCP, or applicable USEPA guidance.

As specified in CERCLA Section 104(a)(1), as amended by SARA, USEPA will provide oversight of the Respondents' activities throughout the RI/FS, including all field sampling activities. The Respondents will support USEPA's initiation and conduct of activities related to the implementation of oversight activities.

At the completion of the RI/FS, USEPA, in consultation with IEPA, will be responsible for the selection of a remedy or remedies for the Source Area and will document this remedy selection in a Record of Decision (ROD). The remedial actions selected by USEPA will meet the cleanup standards specified in CERCLA Section 121. That is, the selected remedial actions will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements of other laws, will be cost-effective, will use permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI and FS Reports as adopted by USEPA will, with the administrative record, form the basis for the selection of the remedies and will provide the information necessary to support the development of the ROD for the Source Area.

SCOPE:

Respondents shall complete the following tasks as part of this RI/FS:

Task 1: Project Scoping and RI/FS Planning Documents
Task 2: Community Involvement Plan
Task 3: Site Characterization and Risk Assessment
Task 4: Remedial Investigation (RI) Report
Task 5: Treatability Studies
Task 6: Development and Screening of Alternatives (Technical Memorandum)
Task 7: Detailed Analysis of Alternatives (FS Report)
Task 8: Progress Reports

TASK 1: PROJECT SCOPING AND RI/FS PLANNING DOCUMENTS

Project Scoping

Scoping is the initial planning phase of the RI/FS process and many of the planning steps begun here are continued and refined in later phases of the RI/FS. For the Ellsworth Industrial Park Source Area (OU1), Respondents shall perform the following scoping activities:

- Meeting with USEPA and IEPA
- Collect and Analyze Existing Data
- Identify Data Gaps
- Identify Preliminary ARARs
- Identify Initial Data Quality Objectives
- Preliminary Planning Report

Meeting: Within thirty (30) days of effective date of this AOC, Respondents shall meet with USEPA/IEPA representatives to discuss all project planning decisions and special concerns associated with the site. The parties shall discuss, among other things, the boundaries of the study area and if a site visit is necessary. The parties shall also discuss the contents of the preliminary planning report described below, which the Respondents will prepare and submit to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA.

Collect and Analyze Existing Data: Respondents shall collect and analyze existing data for the site and develop an initial conceptual site model (CSM) for OU1 from the data collected/analyzed. From this initial CSM, Respondents shall identify the initial remedial action objectives (RAOs) for each actually and potentially affected medium. Respondents shall then identify a preliminary range of broadly defined potential remedial alternatives and associated technology relevant to the known site characteristics. The range of potential alternatives shall encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste, alternatives that involve containment with little or no treatment, and a no-action alternative.

Identify Data Gaps: After analyzing existing data and preparing the initial CSM and RAOs, Respondents shall identify what additional data must be collected in and around the Source Area. These additional data will be used to further refine the CSM, continously as the new data is generated, and assist in modifying the initial set of RAOs. The continous refinement of the CSM and RAOs provides a cost-effective way to ensure confidence in the project outcome, despite the persistence of uncertainties with some of the decision inputs.

Identify Preliminary ARARs: With assistance from USEPA and IEPA, Respondents shall prepare a list of preliminary state and federal applicable or relevant and appropriate requirements (ARARs) for the Source Area.

Data Quality Objectives: Respondents shall identify data quality objectives (DQOs) appropriate for the work at the site. DQOs are statements that specify the type and quality of data to support decisions that have to be made on all remedial response activities at the site. For this project, Respondents shall employ, to the extent possible, real-time measurement technologies (e.g., field-based analysis, high-density sampling, non-specific screening methods, etc.) to support principles of data gathering under the Triad Approach.

Preliminary Planning Report: Within 90 days of effective date of the AOC, Respondents shall submit a preliminary planning report (PPR) to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA The PPR shall: 1) summarize efforts on collecting and analyzing existing data; 2) provide narrative and graphical representations of preliminary CSM and RAOs based on analysis of existing data; 3) describe what additional data is needed to refine the preliminary CSM and RAOs, minimizing uncertainties in decision-making; 4) identify a preliminary set of state and federal ARARs that apply to the Source Area operable unit; and 5) provide a preliminary set of DQO's for all data gathering efforts, including field-based or real-time measurements discussed under the Triad Approach.

RI/FS Planning Documents

Within 30 days of approval of the PPR, Respondents shall submit draft RI/FS planning documents to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA. The draft RI/FS planning documents shall include a 1) draft RI/FS Work Plan and 2) draft Sampling and Analysis Plan (SAP) consisting of a draft Field Sampling Plan (FSP) and a draft Quality Assurance Project Plan (QAPP). Respondents shall submit the final RI/FS planning documents to USEPA and IEPA within twenty-one (21) days of receipt of USEPA's comments. The Respondents shall submit any subsequent revisions, if required, to USEPA and IEPA, within fifteen (15) days of receipt of USEPA's comments on the final document. In its response to USEPA's comments, Respondents shall identify all revisions it has made to previous-version RI/FS planning documents and shall not make any changes to the RI/FS planning documents that are not a direct result of addressing comments. In addition to the above documents, Respondents shall also submit to USEPA a site-specific Health and Safety Plan (HASP) and other site-specific plans as described below.

RI/FS Work Plan: Respondents shall use information from the scoping efforts discussed above, including information contained in the PPR, appropriate USEPA guidance, and technical direction provided by the USEPA Remedial Project Manager (RPM), as the basis for preparing the RI/FS Work Plan. For the purposes of formatting, Respondents

shall refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the RI/FS Work Plan. The document should include, at a minimum, the following items related to the Source Area:

- A summary of the information collected during the project scoping phase, including site history/location, description, known site hydrology/geology, demographics, ecological and natural resource features, locations of existing monitoring wells, areas previously sampled by federal, state, and local agencies, etc.;

- A summary description of available data and identify areas where hazardous substances or contaminants were detected and the detected levels;

- A detailed description of the tasks Respondents will undertake to fill in the data gaps determined during scoping activities, with the primary objective of reducing decision uncertainty by refining and/or fine-tuning the CSM and RAOs previously developed for the site;

- A process for and manner of refining and/or identifying additional state and federal ARARs;

- A process for preparing the human health and ecological risk assessments and the Feasibility Study (FS);

- A detailed description of the information the Respondents will produce during and at the conclusion of each task;

- A description of work products/deliverables Respondents will submit to USEPA and IEPA, including deliverables required by this SOW;

- A schedule for starting and completing each of the required activities and submissions, consistent with the RI/FS guidance and other relevant guidance; and

- A project management plan, including a data management plan (e.g., requirements for project management systems and software, minimum data requirments, data format, and backup data management), monthly reports to USEPA and IEPA, and any presentations to USEPA and IEPA at the conclusion of each major phase of the RI/FS.

- A list of key personnel providing support on the RI.

Sampling and Analysis Plan: Within 30 days after approval of the PPR, Respondents shall prepare a draft sampling and analysis plan (SAP) consisting of the Quality Assurance Project Plan (QAPP) and the Field Sampling Plan (FSP). All sampling and analyses performed at the site, including field-based or real-time measurements advocated

in the Triad Approach, shall conform to USEPA direction, approval, and guidance. Respondents shall also ensure that all laboratories used to perform sample analysis participate in a QA/QC program that complies with USEPA guidance. Respondents shall submit a final SAP within 21 days after receipt of comments on the draft version from USEPA.

Upon request by USEPA, Respondents shall have its laboratory analyze samples submitted by USEPA for quality assurance monitoring. The Respondents shall provide USEPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis. The Respondents shall also ensure the provision of analytical tracking information consistent with OSWER Directive No. 9240.0-2B, *Extending the Tracking of Analytical Services to PRP-lead Superfund Sites.*

Respondents shall notify USEPA not less than fourteen (14) days in advance of any sample collection activity. USEPA reserves the right to take any additional samples that it deems necessary. Upon request by USEPA, Respondents shall allow USEPA or its authorized representatives to take split and/or duplicate samples of any samples collected by Respondents, its contractors, or its agents.

Quality Assurance Project Plan (QAPP). Respondents shall prepare a site-specific QAPP covering sample analysis and data handling for the samples and data collected during the RI. The QAPP shall be prepared in accordance with the *Region 5 Instructions on the Preparation of a Superfund Division Quality Assurance Project Plan Based on EPA QA/R-5* (Revision 0, June 2000); *EPA Requirements for Quality Assurance Project Plans (QA/R-5)* (EPA/240/B-01/003, March 2001); and *EPA Guidance for Quality Assurance Project Plans (QA/G-5)* (EPA/600/R-98/018, February 1998). The QAPP shall describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols the Respondents shall use to achieve the desired DQOs. The DQOs shall at a minimum reflect use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the National Contingency Plan, 40 C.F.R. Part 300. In addition, the QAPP shall address sampling procedures, sample custody, analytical procedures, and data reduction, validation, reporting and personnel qualifications. The Respondents shall also ensure the provision of analytical tracking information consistent with USEPA's Office of Solid Waste and Emergency Response (OSWER) Directive No. 9240.0-2B *Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites.* Field personnel shall be available for USEPA QA/QC training and orientation where applicable.

The Respondents shall demonstrate, in advance, to USEPA's satisfaction, that each laboratory they may use is qualified to conduct the proposed work. This includes the use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and the

DQOs in the USEPA-approved QAPP for the Site. The laboratory must have and follow an approved QA program.

If the Respondents select a laboratory that is not in the Contract Laboratory Program (CLP), the laboratory must use methods consistent with the CLP methods that would be used at this Site for the purposes proposed and the QA/QC procedures approved by USEPA. The laboratory must be accredited under the National Environmental Laboratory Accreditation Program (NELAP) to meet the quality system requirements. Each laboratory and contractor who performs work involving environmental data operation activities for the Respondents under this SOW shall submit a Quality Management Plan (QMP) to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA. The contractors' QMPs shall provide information on how the contractor's management will plan, implement, and assess its Quality System that complies with ANSI/ASQC E4-1994, *Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs*. The Respondents shall prepare the QMPs according to *EPA Requirements for Quality Management Plans*, EPA QA/R-2, March 2001, or equivalent documentation. The Respondents may submit the QMPs as part of the QAPP or as separate documents. USEPA may also require the Respondents to submit detailed information to demonstrate that a laboratory is qualified to conduct the work, including information on personnel qualifications, equipment and material specifications. The Respondents shall provide assurances that USEPA and IEPA have access to laboratory personnel, equipment and records for sample collection, transportation and analysis.
Upon request by U.S. EPA, Respondents shall have such a laboratory analyze samples submitted by U.S. EPA for quality assurance monitoring. Respondents shall provide to U.S. EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis. Respondents shall also ensure provision of analytical tracking information consistent with, at a minimum, OSWER Directive No. 9240.0-2B, *Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites*.

The Respondents shall participate in a pre-QAPP meeting or conference call with USEPA. The purpose of this meeting or conference call is to discuss the QAPP requirements and to obtain any clarification needed to prepare the QAPP.

Field Sampling Plan (FSP): Respondents shall submit a FSP that defines in detail the sampling and data-gathering methods that will be used to collect data for this project. The FSP shall discuss how the specific tasks outlined in the FSP meet the Site-specific objectives of the RI/FS, the detailed objectives of each investigation, and the DQOs.

For each investigation (e.g., waste characterization, etc.), the FSP shall present a statement of the problems and the potential problems posed by the Site; discuss previous sampling locations, analytical results and other relevant information (e.g., visual

observations, historical records, air photo analyses); discuss the detailed objectives of each investigation, including the DQOs; and discuss and explain in detail how the specific work and activities the Respondents shall perform as part of each investigation will meet the objectives of the investigation and be used in the remedial investigation, the human health and ecological risk assessments and the feasibility study.

For each investigation, the FSP shall include a detailed description of the sampling objectives; sample locations, depths and frequency; sampling equipment and procedures; field measurements, analyses and procedures; sample preservation and handling; the field notes that the Respondents shall collect; field quality assurance; planned analyses; standard operating procedures; and decontamination procedures. The FSP shall include step-by-step instructions and be written so that a field sampling team unfamiliar with the Site would be able to gather the samples and the required field information according to the approved protocols. The FSP shall explain and justify why specific equipment and sampling procedures were selected and how they are appropriate for the work being performed and the objectives of this investigation. The FSP shall also include one or more figures that show all previous sampling locations with notes for any significant findings including groundwater elevation contours and the planned RI sample locations on the same map. The FSP shall also include a schedule which identifies the timing for the initiation and completion of all tasks the Respondents shall complete as a part of the FSP. If the Respondents plan to collect data from existing monitoring wells, they must collect additional data and/or demonstrate to USEPA's satisfaction that the wells are appropriately located and screened to meet the sampling objectives (e.g., most existing wells are screened 5 to 10 or more feet below the water table).

Respondents shall notify USEPA and IEPA not less than 14 calendar days in advance of any sample collection activity. USEPA and IEPA shall have the right to take any additional samples that they deem necessary, including split and/or duplicate samples of any samples collected by Respondents or their contractors or agents performing work under this AOC..

Health and Safety Plan. Respondents shall prepare a site-specific Health and Safety Plan (HASP) that complies with applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 CFR Part 1910. At a minimum, the HASP must follow USEPA's guidance document, *Standard Operating Safety Guides* (Publication 9285.1-03, PB92-963414, June 1992). The HASP shall include the eleven (11) elements described in the RI/FS Guidance, such as a health and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and site control.

USEPA does not approve the Respondents' HASP, but reviews it to ensure that all necessary elements are included and that the plan provides for the protection of human health and environment. After its review, USEPA may provide comment as may be necessary and appropriate.

Other Plans: Within thirty days after USEPA approval of the RI/FS Work Plan, the Respondents shall prepare the following for review and approval by USEPA (in consultation with IEPA):

1. A *Site Management Plan (SMP)* that provides USEPA with a written understanding of how access, security, contingency procedures, management responsibilities, and waste disposal are to be handled;

2. A *Pollution Control & Mitigation Plan* that outlines the process, procedures, and safeguards that will be used to ensure contaminants or pollutants are not released off-site during the implementation of the RI;

3. A *Transportation & Disposal Plan* that outlines how wastes that are encountered during the RI will be managed and disposed of. Respondents shall specify the procedures that will be followed when wastes will be transported off-site for storage, treatment, and/or disposal; and

4. Other plans, as necessary, to implement the RI.

TASK 2: COMMUNITY RELATIONS SUPPORT

USEPA has responsibility for developing and implementing community relations activities for the Site, including conducting community interviews and developing a community involvement plan (CIP). Although implementing the CIP is USEPA's responsibility, the Respondents, if directed by USEPA, shall assist by 1) providing information regarding site history 2) participating in public meetings 3) assisting in preparing fact sheets for distribution to the general public and 4) conducting other activities as approved by USEPA.

TASK 3: SITE CHARACTERIZATION AND RISK ASSESSMENT

Site Characterization

Within 21 days after approval of all RI/FS Planning Documents under Task 1 of this SOW (except for the HASP), Respondents shall begin conducting site characterization work at OU1. This work shall be performed according to the approved RI/FS Work Plan, FSP, and QAPP. All field work and observations performed by the Respondents shall be documented in detailed field logs and/or standard format information sheets. Also, Respondents shall notify USEPA of any field activity at least fourteen (14) days prior to mobilization. Progress reports described in Task 8 of this SOW shall summarize progress with said field activity. In addition, Respondents shall provide USEPA and IEPA with a paper and electronic copy of laboratory data within the monthly progress reports, no later than ninety (90) days after samples are shipped for analysis.

Site characterization shall include, but not limited to, the following major areas of study:

Investigate and Define Site Physical and Biological Characteristics:

Respondents shall collect data on the physical and biological characteristics of the Source Area and its vicinity, including physical physiography, geology, and hydrology, and specific physical characteristics identified in the approved Work Plan. The results of this work will be used to define potential transport pathways and human/ecological receptor populations and to identify potential impacts on natural resources. In the event the site's physical characteristics prove insufficient for an engineering evaluation, Respondents will also obtain adequate engineering data (e.g., pumping characteristics) for the projection of contaminant fate and transport and development/screening of remedial action alternatives, including information necessary to assess treatment alternatives.

Define Sources of Contamination:

Respondents shall characterize the media in and around the Source Area (i.e., soil, groundwater, surface water) for sources of contamination. The areal extent and depth of contamination shall be determined by sampling at incremental depths on a specified sampling grid or as otherwise defined in the approved Work Plan. The physical characteristics and chemical constituents, including their associated concentrations, shall be determined for all known and discovered contaminant sources at the site. Work on defining the source(s) of the contamination will include analyzing the potential for contaminant release, contaminant mobility and persistence, and other characteristics important for evaluating remedial actions and assessing treatment technologies.

To the extent possible, Respondents shall incorporate sampling strategies described in the Triad Approach for conducting this work (i.e., real-time measurements).

Describe Nature and Extent of Contamination:

Respondents shall gather information to describe the nature and extent of contamination as the final step in the field investigation. To accomplish this, the information about the site's physical and biological characteristics and sources of contamination will be used to give a preliminary estimate of the contaminants that may be present and may have migrated. Respondents will then implement an iterative and dynamic sampling plan sufficient to detect and quantify the contaminant concentrations and enable Respondents to determine fate and transport mechanisms at the site. This information, in turn, shall be used by Respondents to periodically refine the preliminary CSM and RAOs developed during the scoping phase of the project. This process is continued until the area and depth of contamination are known to the level of contamination established in the QAPP and DQOs.

Evaluate Site Characteristics:

Respondents shall analyze and evaluate the data collected under this task to describe: 1) Site physical and biological characteristics, 2) contaminant source characteristics, 3) nature and extent of contamination, including impacts on natural resources, and 4) contaminant fate and transport, and to refine preliminary CSM and RAOs developed earlier in this project. The format for presenting this information is described in Task 4 below.

Human Health Risk Assessment:

Respondents shall conduct a baseline human health risk assessment to determine whether Source Area contaminants pose a current or potential risk to human health and environment, in the absence of any remedial action. The risk assessment shall be conducted in accordance with USEPA guidance, including at a minimum: 1) *Risk Assessment Guidance for Superfund (RAGS), Volume 1-Human Health Evaluation Manual (Part A), Interim Final (EPA-540-1-89-002, OSWER Directive 9285.7-01A, 12/1/89;* and 2) *Risk Assessment Guidance for Superfund (RAGS), Volume 1 - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments), Final (EPA 540-R-97-033, OSWER 9285.7-01D, December 2001).* The risk assessment shall include discussions on the following areas: 1) Hazard Identification; 2) Dose-Response Assessment; 3) Exposure/Pathway Analysis; 4) Characterization of Site and Potential Receptors; 5) Exposure Assessment; 6) Risk Characterization; and 7) Identification of Limitations/Uncertainties.

The human health risk assessment shall use data from the site and nearby areas to identify the contaminants of concern (COCs), provide an estimate of how and to what extent human receptors might be exposed to these COCs currently and into the future, and provide an assessment of the health effects associated with these COCs. This risk assessment shall project the potential risk of health problems occurring if no cleanup action is taken at the Source Area and/or near vicinity and establish target action levels for COCs (carcinogenic and non-carcinogenic). The assessment shall define central tendency and reasonable maximum estimates of exposure for current and reasonably anticipated future land use considerations.

Ecological Risk Assessment:

Respondents shall conduct an Ecological Risk Assessment in accordance with USEPA guidance, including the following: *Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments, (EPA-540-R-97-006, June 1997, OSWER Directive 9287.7-25).* This assessment shall evaluate current and potential future risks to ecosystems posed by Source Area contaminants and addresses the following areas: 1) Hazard Identification; 2) Dose-Response Assessment; 3) Exposure/Pathway Analysis; 4) Characterization of Site and Potential Receptors; 5) Selection of Chemicals, Indicator Species, and End Points; 6) Exposure Assessment; 7) Toxicity Assessment/Ecological Effects Assessment; 8) Risk Characterization; and 9) Identification of Limitations/Uncertainties.

TASK 4: REMEDIAL INVESTIGATION (RI) REPORT

Respondents shall prepare the RI Report in three phases: 1) Site Characterization Technical Memorandum, 2) Risk Assessment Technical Memorandum, and 3) RI Report. All 3 reports shall be shall be submitted in draft versions to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA. These documents shall include, but not limited to, the following elements:

4.1 Site Characterization Technical Memorandum

Within 60 days after completing site characterization work described under Task 3, Respondents shall submit a draft Site Characterization Technical Memorandum for the Source Area operable unit to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA. The document shall include, but not limited to, the following elements:

1. Introduction
    - Purpose of Report
    - Site Description and Background
        - Site Location and Physical Setting including General Geology, Hydrology, Hydrogeology, Surrounding Land Use and Populations, Groundwater Use, Surface Water Bodies, Ecological Areas including Sensitive Ecosystems and Meteorology/Climatology
        - Past and Present Facility Operations/Site Usage and Disposal Practices, Including Waste Disposal/Operations Areas based on Historical Air Photos
        - Previous Investigations and Results
    - Report Organization

2. Study Area Investigations, Procedures and Methodologies, including a Detailed Description of All Field Activities Associated with Site Characterization and Any Deviations from Approved Planning Documents (i.e., Describe How the RI Was Conducted)
    - Detailed Sampling and Data Gathering Objectives; Data Gaps and Data Needs Identified During Project Scoping and Course of RI
    - Surface Features Inventory, including Topographic Mapping, etc.
    - Surrounding Land Use and Population Inventories/Surveys
    - Meteorology/Climate Data Collection
    - Waste Characterization Activities
    - Surface and Subsurface Soils Investigations
    - Hydrogeologic Investigations and Groundwater Use Inventories
    - Surface Water, Sediment and Floodplain Investigations
    - Ecological Investigations
    - Treatability Studies

3. Physical Characteristics of the Study Area, Analytical Results and Modeling
   - Surface Features (Natural and Manmade) and Topography
   - Surrounding Land Use and Populations
   - Meteorology/Climate
   - Geology, Contaminant Source Areas, Waste Characterizations, Surface and Subsurface Soils, Hot Spots, and Analytical Data
   - Hydrogeology, Groundwater Conditions, Analytical Data, Contaminant Trends
   - Surface Water Hydrology and Surface Water, Sediment and Floodplain Characterizations, Analytical Data
   - Ecological Characterization and Sensitive Ecosystems

4. Summary of the Nature and Extent of Contamination, Contaminant Fate and Transport and Modeling Results
   - Contaminant Source/Waste Areas, Surface and Subsurface Soil Contamination and Hot Spots
     - Contaminant Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Contaminant Fate and Transport Processes; Migration to Other Areas and Media; Modeling; Detected and Modeled Concentrations in Other Areas and Media
   - Groundwater Contaminants
     - Contaminant Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Groundwater Use; Fate and Transport Processes; Migration to Other Areas and Media; Modeling; Detected and Modeled Concentrations in Other Areas and Media
   - Surface Water and Sediments
     - Contaminants and Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Contaminant Fate and Transport Processes; Migration to Other Areas and Media; Modeling; Detected and Modeled Concentrations

5. Summary and Conclusions

   - Summary
     - Nature and Extent of Contamination
     - Fate and Transport

   - Conclusions
     - Data Limitations and Recommendations for Future Work

6. References

7. Tables and Figures
   (at least one set of figures shall be no larger than 11" x 17")

8. Appendices
   - Log Books
   - Soil Boring Logs
   - Test Pit/Trenching Logs
   - Direct Soil Solute Sampling Construction Diagrams
   - Monitoring Well Construction Diagrams
   - Sample Collection Logs
   - Private and Public Well Records
   - Analytical Data and Data Validation Reports
   - Detailed Modeling Reports

4.2 Risk Assessment Technical Memorandum

Within 30 days after USEPA approval of the Site Characterization Technical Memorandum above, Respondents shall submit a draft Human Health Risk Assessment Report and a draft Ecological Risk Assessment Report for the Source Area operable unit to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA. Each report shall contain, but not limited to, the following elements:

1) Introduction
2) Summary and Conclusions
3) Hazard Identification
4) Dose-Response Assessment
5) Exposure/Pathway Analysis
6) Characterization of Site and Potential Receptors
7) Exposure Assessment
8) Risk Characterization
9) Identification of Limitations/Uncertainties
10) Figures and Attachments; and
11) References.

4.3 RI Report

Within 30 days following USEPA's approval of the Risk Assessment Technical Memorandum described above, Respondents shall submit a draft RI Report for the Source Area operable unit to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA. The report shall fully address and incorporate USEPA's comments on the Site Characterization Technical Memorandum and Risk Assessment Technical Memorandum. In addition, the RI Report shall

also include the information USEPA will need to prepare the Record of Decision (ROD) for the Source Area, as described in Chapters 6 and 9 of USEPA's *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Documents* (EPA 540-R-98-031, July 1999).

The RI Report shall include, but not limited to, the following elements:

1. Executive Summary

2. Introduction
   - Purpose of Report
   - Site Description and Background
     - Site Location and Physical Setting Including General Geology, Hydrology, Hydrogeology, Surrounding Land Use and Populations, Groundwater Use, Surface Water Bodies, Ecological Areas including Sensitive Ecosystems and Meteorology/Climatology
     - Past and Present Facility Operations/Site Usage and Disposal Practices, Including Waste Disposal/Operations Areas Based on Historical Air Photos
     - Previous Investigations and Results
   - Report Organization

3. Study Area Investigations, Procedures and Methodologies, including a Detailed Description of All Field Activities Associated with Site Characterization and Any Deviations from Approved Planning Documents (i.e., Describe How the RI Was Conducted)
   1. Detailed Sampling and Data Gathering Objectives; Data Gaps and Data Needs Identified During Project Scoping and Course of RI
   2. Surface Features Inventory, Including Topographic Mapping, etc.
   3. Surrounding Land Use and Population Inventories/Surveys
   4. Meteorology/Climate Data Collection
   5. Waste Characterization Activities
   6. Surface and Subsurface Soils Investigations
   7. Hydrogeologic Investigations and Groundwater Use Inventories
   8. Surface Water, Sediment and Floodplain Investigations
   9. Ecological Investigations
   10. Treatability Studies

4. Physical Characteristics of the Study Area, Analytical Results and Modeling Surface Features (Natural and Manmade) and Topography
   1. Surrounding Land Use and Populations
   2. Meteorology/Climate

3. Geology, Contaminant Source Areas, Waste Characterizations, Surface and Subsurface Soils, Hot Spots, and Analytical Data
4. Hydrogeology, Groundwater Conditions, Analytical Data, Contaminant Trends
5. Surface Water Hydrology and Surface Water, Sediment and Floodplain Characterizations, Analytical Data
6. Ecological Characterization and Sensitive Ecosystems

7. Summary of the Nature and Extent of Contamination, Contaminant Fate and Transport and Modeling Results
   - Contaminant Source/Waste Areas, Surface and Subsurface Soil Contamination, and Hot Spots
     - Contaminant Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Contaminant Fate and Transport Processes; Migration to Other Areas and Media; Modeling, Detected and Modeled Concentrations in Other Areas and Media
   - Groundwater Contaminants
     - Contaminant Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Groundwater Use; Fate and Transport Processes; Migration to Other Areas and Media; Modeling; Detected and Modeled Concentrations in Other Areas and Media
   - Surface Water and Sediments
     - Contaminants and Concentrations; Quantity, Volume, Size and/or Magnitude of Contamination; Potential Routes of Migration; Physical and Chemical Attributes and Contaminant Persistence; Contaminant Fate and Transport Processes; Migration to Other Areas and Media; Modeling; Detected and Modeled Concentrations in Other Areas and Media

6. Human Health Risk Assessment Summary

7. Ecological Risk Assessment Summary

8. Summary and Conclusions
   - Summary
     - Nature and Extent of Contamination
     - Fate and Transport
     - Risk Assessment
   - Conclusions
     - Data Limitations and Recommendations for Future Work

- Recommended Remedial Action Objectives

9. References

10. Tables and Figures
    (at least one set of figures shall be no larger than 11" x 17")

11. Appendices
    - Log Books
    - Soil Boring Logs
    - Test Pit/Trenching Logs
    - Direct Soil Solute Sampling Construction Diagrams
    - Monitoring Well Construction Diagrams
    - Sample Collection Logs
    - Private and Public Well Records
    - Analytical Data and Data Validation Reports
    - Detailed Modeling Reports

Respondents shall submit draft, final, and revised final versions of the RI Report in the same manner as the planning documents submitted under Task 1 of this SOW. The final RI Report shall also include a response to comments, explaining how each of USEPA's comments in the draft RI have been satisfactorily addressed.

TASK 5: TREATABILITY STUDIES

Respondents shall conduct treatability studies, except where Respondents can demonstrate to US EPA's satisfaction that they are not needed. Major components of the treatability studies include determination of the need for and scope of studies, the design of the studies, and the completion of the studies, as described in the SOW. During treatability studies, Respondents shall provide USEPA with the following deliverables:

5.1 *Identification of Candidate Technologies Memorandum.* This memorandum shall be submitted within 30 days after completion of field investigations [is this Site Characterization field investigations, or might there be other supplemental field investigations?]. If USEPA disapproves of or requires revisions to the technical memorandum identifying candidate technologies, in whole or in part, Respondents shall amend and submit to USEPA a revised technical memorandum identifying candidate technologies which is responsive to the directions in all USEPA comments, within 21 days of receiving USEPA's comments.

5.2 *Treatability Testing Statement of Work.* If USEPA determines that treatability testing is required, within 30 days thereafter [or as specified by USEPA], Respondents shall submit a treatability testing Statement of Work.

5.3 *Treatability Testing Work Plan.* Within 30 days of submission of the treatability testing Statement of Work, Respondents shall submit a treatability testing Work Plan, including a schedule. If USEPA disapproves of or requires revisions to the treatability testing Work Plan, in whole or in part, Respondents shall amend and submit to USEPA a revised treatability testing Work Plan which is responsive to the directions in all USEPA comments, within 21 days of receiving USEPA's comments.

5.4 *Treatability Study Sampling and Analysis Plan.* Within 30 days of the identification of the need for a separate or revised QAPP or FSP, Respondents shall submit a treatability study sampling and analysis plan. If USEPA disapproves of or requires revisions to the treatability study sampling and analysis plan, in whole or in part, Respondents shall amend and submit to USEPA a revised treatability study sampling and analysis plan which is responsive to the directions in all USEPA comments, within 21 days of receiving USEPA's comments.

5.5 *Treatability Study Site Health and Safety Plan.* Within 30 days of the identification of the need for a revised health and safety plan, Respondents shall submit a treatability study site health and safety plan.

5.6 *Treatability Study Evaluation Report.* Within 30 days of completion of any treatability testing, Respondents shall submit a treatability study evaluation report as provided in the Statement of Work and Work Plan. If USEPA disapproves of or requires revisions to the treatability study report, in whole or in part, Respondents shall amend and submit to USEPA a revised treatability study report which is

TASK 6: DEVELOPMENT AND SCREENING OF ALTERNATIVES

Respondents shall develop and screen remedial alternatives to determine an appropriate range of waste management options that the Respondents shall evaluate for the Source Area operable unit. This range of alternatives shall include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which vary in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed; options involving containment with little or no treatment; options involving both treatment and containment; and a no-action alternative.

The Respondents may perform a final screening process based on short and long term aspects of effectiveness, implementability, and relative cost. Generally, this screening process is only necessary when there are many feasible alternatives available for a detailed analysis. If necessary, the Respondents shall conduct the screening of alternatives to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening shall preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives shall include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondents shall prepare an Alternatives Screening Technical Memorandum

that summarizes the results and reasoning employed in screening; arrays the alternatives that remain after screening; and identifies the action-specific ARARs for the alternatives that remain after screening.

6.1 Alternatives Development and Screening Deliverables

The Respondents shall prepare and submit three technical memoranda for this task: a Remedial Action Objectives Technical Memorandum, an Alternatives Screening Technical Memorandum and a Comparative Analysis of Alternatives Memorandum.

6.1.1 *Remedial Action Objectives (RAO) Technical Memorandum*

Within 30 days after submitting the draft RI Report, Respondents shall submit a RAO Technical Memorandum to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA. Based on evaluation of existing and new information (e.g., human health and ecological risk assessment, site characterization data, etc.), the RAO Technical Memorandum shall represent a refinement of the preliminary remedial action objectives that were established under Task 1 of this SOW. This technical memorandum shall specify the constituents of concern and the media of interest; actual and potential exposure pathways and receptors; and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

6.1.2 *Alternatives Screening Technical Memorandum*

Within 30 days after receipt of USEPA's comments on the RAO Technical Memorandum, Respondents shall submit an Alternatives Screening Technical Memorandum to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA. The Alternatives Screening Technical Memorandum shall summarize the work performed during and the results of each of the above tasks, and shall include an alternatives array summary. If required by USEPA, the Respondents shall modify the alternatives array to assure that the array identifies a complete and appropriate range of viable alternatives to be considered in the detailed analysis. The Alternatives Screening Technical Memorandum shall document the methods, the rationale and the results of the alternatives screening process. Also, the memorandum shall include sections dealing with the following:

Develop General Response Actions: In the Alternatives Technical Memorandum, Respondents shall develop general response actions for each medium of interest including containment, treatment, excavation, pumping, or other actions, singly or in combination, to satisfy the EPA-approved remedial action objectives.

Identify Areas or Volumes of Media: In the Alternatives Technical Memorandum, Respondents shall identify areas or volumes of media to which the general response actions may apply, taking into account requirements for protectiveness as identified in the remedial action objectives. Respondents shall also take into account the chemical and physical characterization of the Site.

Identify, Screen, and Document Remedial Technologies: In the Alternatives Technical Memorandum, Respondents shall identify and evaluate technologies applicable to each general response action to eliminate those that cannot be implemented at the Site. Respondents shall refine applicable general response actions to specify remedial technology types. Respondents shall identify technology process options for each of the technology types concurrently with the identification of such technology types or following the screening of considered technology types. Respondents shall evaluate process options on the basis of effectiveness, implementability, and cost factors to select and retain one or, if necessary, more representative processes for each technology type. Respondents shall summarize and include the technology types and process options in the Alternatives Screening Technical Memorandum. Whenever practicable, the alternatives shall also consider the CERCLA preference for treatment over conventional containment or land disposal approaches.

In the Alternatives Technical Memorandum, Respondents shall provide a preliminary list of alternatives to address contaminated soil, sediments, surface water, groundwater, and air contamination related to the Source Area that shall consist of, but is not limited to, treatment technologies, removal and off-Site treatment/disposal, removal and on-Site disposal, and in-place containment for soils, sediments, and wastes. See 40 CFR 300.430(e)(1)-(7). Also, the Respondents shall specify the reasons for eliminating any alternatives.

Assemble and Document Alternatives: Respondents shall assemble the selected representative technologies into alternatives for each affected medium or discrete source area. Together, all of the alternatives shall represent a range of treatment and containment combinations that shall address either the Site or the operable unit as a whole. Respondents shall prepare a summary of the assembled alternatives and their related action-specific ARARs for the Alternatives Screening Technical Memorandum. Respondents shall specify the reasons for eliminating alternatives during the preliminary screening process. Respondents shall also include a "no action" alternative for comparison purposes.

Refine Alternatives: Respondents shall refine the remedial alternatives to identify the volumes of contaminated media addressed by the proposed processes and size critical unit operations as necessary. Respondents shall collect sufficient information for an adequate comparison of alternatives. Respondents shall also modify the remedial action objectives for each chemical in each medium as

necessary to incorporate any new human health and ecological risk assessment information presented in the Respondents' baseline human health and ecological risk assessment reports. Additionally, Respondents shall update action-specific ARARs as the remedial alternatives are refined.

TASK 7: DETAILED ANALYSIS OF ALTERNATIVES (FS Report)

Respondents shall conduct and present a detailed analysis of remedial alternatives to provide EPA with the information needed to select a remedy for the Source Area.

(A) *Detailed Analysis of Alternatives*

Respondents shall conduct a detailed analysis of the remedial alternatives for the Source Area. The detailed analysis shall include an analysis of each remedial option against a set of nine evaluation criteria, and a comparative analysis of all options using the same nine criteria as a basis for comparison.

1. Apply Nine Criteria and Document Analysis

The Respondents shall apply the nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will protect human health and the environment and meet remedial action objectives; will comply with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment and how the alternative meets each of the remedial action objectives; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) cost; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: criteria 8 and 9 are considered after the RI/FS report has been released to the general public.) For each alternative the Respondents shall provide: (1) A description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative, and (2) A discussion of the individual criterion assessment. If the Respondents do not have direct input on criteria (8) state (or support agency) acceptance and (9) community acceptance, EPA will address these criteria.

2. Compare Alternatives Against Each Other and Document the Comparison of Alternatives

Respondents shall perform a comparative analysis between the remedial alternatives. That is, Respondents shall compare each alternative against the other alternatives using the evaluation criteria as a basis of comparison. EPA will then identify and select the preferred alternative. Respondents shall prepare a Comparative Analysis of Alternatives Technical Memorandum which summarizes the results of the comparative analysis and fully and satisfactorily addresses

and incorporates EPA's comments on the Alternatives Screening Technical Memorandum. Respondents shall incorporate EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum in the draft FS Report. Respondents shall submit the Comparative Analysis of Alternatives Memorandum within twenty-one (21) calendar days after receipt of EPA's comments on the Alternatives Screening Technical Memorandum.

(B) *Feasibility Study (FS) Report*

Within twenty-one (21) days after USEPA's approval of the Comparative Analysis of Alternatives Technical Memorandum, Respondents shall prepare and submit a draft FS Report to USEPA and IEPA, for review and approval by USEPA in consultation with IEPA. The FS report shall summarize the development and screening of the remedial alternatives and present the detailed analysis of remedial alternatives. In addition, the FS Report shall also include the information USEPA will need to prepare relevant sections of the Record of Decision (ROD) for the Source Area [see Chapters 6 and 9 of USEPA's *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents* (EPA 540-R-98-031, July 1999) for the information that is needed].

TASK 8: MONTHLY PROGRESS REPORTS

Respondents shall submit monthly written progress reports to USEPA and IEPA concerning actions undertaken pursuant to the AOC and this SOW, beginning 30 calendar days after the effective date of the AOC, until termination of the AOC, unless otherwise directed in writing by the RPM. These reports shall include, but not limited to, a description of all significant developments during the preceding period, including the work performed and problems encountered; all analytical data received during the reporting period; a description of all developments anticipated during the next reporting period, including a schedule of work to be performed; and a description of all anticipated problems, and actual or planned resolutions of past or anticipated problems. The monthly progress reports will summarize the field activities conducted each month, including, but not limited to, drilling and sample locations, depths and descriptions; boring logs; sample collection logs; field notes; problems encountered; solutions to problems; a description of any modifications to the procedures outlined in the RI/FS Work Plan, FSP, QAPP, or HASP, with justifications for the modifications; and upcoming field events.

ATTACHMENT A

Summary of Major Submittals for the Remedial Investigation/Feasibility (RI/FS) Study Ellsworth Industrial Park Downers Grove, DuPage County, Illinois		
DELIVERABLE	**COPIES**	**SUBMITTAL DATE**
Preliminary Planning Report (PPR)	3	Within 90 after effective date of AOC
Draft RI/FS Work Plan	3	Within 30 days after approval of PPR
Final RI/FS Work Plan	3	Within 21 days of receipt of USEPA comments
Modifications, if any, to Final RI/FS Work Plan	3	Within 15 days after receipt of USEPA comments
Draft Sampling and Analysis Plan (SAP)	3	Within 30 days after approval of PPR
Final SAP	3	Within 21 days after receipt of USEPA comments
Modifications, if any, to Final SAP	3	Within 15 days of receipt of USEPA comments
Health and Safety Plan (HASP)	3	Within 30 days after approval of PPR
Other Plans	3	Within 30 days after RI/FS Work Plan approval
Draft Site Characterization Technical Memorandum	3	Within 60 days after completing site characterization work under Task 3
Final Site Characterization Technical Memorandum	3	Within 21 days after receipt of USEPA comments
Draft Risk Assessment Technical Memorandum	3	Within 30 days after approval of Site Characterization Technical Memorandum
Final Risk Assessment Technical Memorandum	3	Within 21 days after receipt of USEPA comments on draft Risk Assessment Technical Memorandum
Draft Remedial Investigation (RI) Report	3	Within 30 days after approval of Risk Assessment Technical Memorandum

Summary of Major Submittals for the Remedial Investigation/Feasibility (RI/FS) Study Ellsworth Industrial Park Downers Grove, DuPage County, Illinois		
DELIVERABLE	**COPIES**	**SUBMITTAL DATE**
Final RI Report	3	Within 21 days after receipt of USEPA comments on draft RI Report
Identification of Candidate Technologies Memorandum (if needed)	3	Within 30 days after completion of field investigations
Treatability Testing Statement of Work (if needed)	3	Within 30 days of USEPA determination that a treatability study is needed
Treatability Study Work Plan (if needed)	3	Within 30 days after receipt of Treatability Testing Statement of Work
Treatability Study Sampling and Analysis Plan (if needed)	3	Within 30 days after determining need for a separate or revised QAPP or FSP
Treatability Study Health and Safety Plan (if needed)	3	Within 30 days after determining need for a revised HASP
Treatability Study Evaluation Report (if needed)	3	Within 30 days after completion of treatability study
Draft Remedial Action Objectives (RAO) Technical Memorandum	3	Within 30 days after submission of draft RI Report
Final RAO Technical Memorandum	3	Within 21 days after receipt of USEPA comments on draft RAO Technical Memorandum
Draft Alternatives Screening Technical Memorandum	3	Within 30 days of receipt of USEPA comments on draft RAO Technical Memorandum
Final Alternatives Screening Technical Memorandum	3	Within 21 days after receipt of USEPA comments on draft Alternatives Screening Technical Memorandum

Summary of Major Submittals for the Remedial Investigation/Feasibility (RI/FS) Study Ellsworth Industrial Park Downers Grove, DuPage County, Illinois		
DELIVERABLE	**COPIES**	**SUBMITTAL DATE**
Draft Comparative Analysis of Alternatives Technical Memorandum	3	Within 30 days after receipt of USEPA comments on draft Alternatives Screening Technical Memorandum
Final Comparative Analysis of Alteratives Technical Memorandum	3	Within 21 days after receipt of USEPA comments on draft Comparative Analysis of Alternatives Memorandum
Draft Feasibility Study (FS) Report	3	Within 21 days after approval of Comparative Analysis of Alternatives Technical Memorandum
Final FS Report	3	Within 21 days after receipt of USEPA comments on draft FS Report
Monthly Progress Reports	3	monthly, commencing 30 calendar days after effective date of AOC

EXHIBIT B
PARTIAL LIST OF GUIDANCE

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process. The majority of these guidance documents, and additional applicable guidance documents, may be downloaded from the following websites:

http://www.epa.gov/superfund/pubs.htm (General Superfund)
http://cluin.org (Site Characterization, Monitoring and Remediation)
http://www.epa.gov/ORD/NRMRL/Pubs (Site Characterization and Monitoring)
http://www.epa.gov/quality/qa_docs.html#guidance (Quality Assurance)
http://www.epa.gov/superfund/programs/risk/toolthh.htm (Risk Assessment - Human)
http://www.epa.gov/superfund/programs/risk/tooleco.htm (Ecological Risk Assessment)
http://www.epa.gov/superfund/programs/lead (Risk Assessment - Lead)
http://cfpub.epa.gov/ncea (Risk Assessment - Exposure Factors/Other)
http://www.epa.gov/nepis/srch.htm (General Publications Clearinghouse)
http://www.epa.gov/clariton/clhtml/pubtitle.html (General Publications Clearinghouse)

1. The (revised) National Contingency Plan;

2. *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9355.3-01, EPA/540/G-89/004, October 1988.

3. *Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites*, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-91/001, February 1991.

4. *Implementing Presumptive Remedies*, U.S. EPA, Office of Emergency and Remedial Response, EPA-540-R-97-029, October 1997.

5. *Presumptive Remedy for CERCLA Municipal Landfill Sites*, U.S. EPA, OSWER Directive No. 9355.0-49FS, EPA-540-F-93-035, September 1993.

6. *Presumptive Remedies: CERCLA Landfill Caps RI/FS Data Collection Guide*, U.S. EPA, OSWER 9355.3-18FS, EPA/540/F-95/009, August 1995.

7. *Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Ground Water at CERCLA Sites*, OSWER 9283.1-12, EPA-540-R-96-023, October 1996.

8. *Field Analytical and Site Characterization Technologies Summary of Applications*, U.S. EPA, EPA-542-F-97-024, November 1997.

9. *CLU-IN Hazardous Waste Clean-Up Information World Wide Web Site*, U.S. EPA, EPA-542-F-99-002, February 1999.

10. *Field Sampling and Analysis Technology Matrix and Reference Guide*, U.S. EPA, EPA-542-F-98-013, July 1998.

11. *Subsurface Characterization and Monitoring Techniques: A Desk Reference Guide, Volumes 1 and 2*, U.S. EPA, EPA/625/R-93/003, May 1993.

12. *Use of Airborne, Surface, and Borehole Geophysical Techniques at Contaminated Sites: A Reference Guide*, U.S. EPA, EPA/625/R-92/007(a,b), September 1993.

13. *Innovations in Site Characterization: Geophysical Investigation at Hazardous Waste Sites*, U.S. EPA, EPA-542-R-00-003, August 2000.

14. *Innovative Remediation and Site Characterization Technology Resources*, U.S. EPA, OSWER, EPA-542-F-01-026b, January 2001.

15. *Handbook of Suggested Practices for the Design and Installation of Ground-Water Monitoring Wells*, U.S. EPA, EPA/600/4-89/034, 1991.

16. *Ground-Water Sampling Guidelines for Superfund and RCRA Project Managers*, U.S. EPA, EPA-542-S-02-001, May 2002.

17. *Ground Water Issue: Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures*, U.S. EPA, EPA/540/S-95/504, April 1996.

18. *Superfund Ground Water Issue: Ground Water Sampling for Metals Analysis*, U.S. EPA, EPA/540/4-89/001, March 1989.

19. *Resources for Strategic Site Investigation and Monitoring*, U.S. EPA, OSWER, EPA-542-F-010030b, September 2001.

20. *Region 5 Framework for Monitored Natural Attenuation Decisions for Groundwater*, U.S. EPA Region 5, September 2000.

21. *Ground Water Issue: Suggested Operating Procedures for Aquifer Pumping Tests*, U.S. EPA, OSWER, EPA/540/S-93/503, February 1993.

22. *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water*, U.S. EPA, EPA/600/R-98/128, September 1998.

23. *Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action and Underground Storage Tank Sites,* U.S. EPA, OSWER Directive 9200.4-17P, April 21, 1999.

24. *Ground Water Issue: Fundamentals of Ground-Water Modeling,* U.S. EPA, OSWER, EPA/540/S-92/005, April 1992.

25. *Assessment Framework for Ground-Water Model Applications*, U.S. EPA, OSWER Directive #9029.00, EPA-500-B-94-003, July 1994.

26. *Ground-Water Modeling Compendium - Second Edition: Model Fact Sheets, Descriptions, Applications and Cost Guidelines*, U.S. EPA, EPA-500-B-94-004, July 1994.

27. *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*, U.S. EPA, Office of Solid Waste and Emergency Response, OSWER Directive No. 9200.1-23P, EPA 540-R-98-031, July 1999.

28. *Region 5 Instructions on the Preparation of A Superfund Division Quality Assurance Project Plan Based on EPA QA/R-5, Revision 0*, U.S. EPA Region 5, June 2000.

29. *Guidance for the Data Quality Objectives Process (QA-G-4)*, U.S. EPA, EPA/600/R-96/055, August 2000.

30. *Guidance for the Data Quality Objectives Process for Hazardous Waste Sites (QA/G-4HW)*, U.S. EPA, EPA/600/R-00/007, January 2000.

31. *Guidance for the Preparation of Standard Operating Procedures (QA-G-6)*, U.S. EPA, EPA/240/B-01/004, March 2001.

32. *EPA Requirements for Quality Management Plans (QA/R-2)*, U.S. EPA, EPA/240/B-01/002, March 2001.

33. *EPA Requirements for QA Project Plans (QA/R-5)*, U.S. EPA, EPA/240/B-01/003, March 2001.

34. *Guidance for Quality Assurance Project Plans (QA/G-5)*, U.S. EPA, EPA/600/R-98/018, February 1998.

35. *Users Guide to the EPA Contract Laboratory Program*, U.S. EPA, Sample Management Office, OSWER Directive No. 9240.0-01D, January 1991.

36. *Technical Guidance Document: Quality Assurance and Quality Control for Waste Containment Facilities*, U.S. EPA, EPA/600/R-93/182, 1993.

37. *Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part A)*, U.S. EPA, EPA/540/1-89/002, December 1989.

38. *Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part B, Development of Risk-Based Preliminary Remediation Goals)*, U.S. EPA, EPA/540/R-92/003, OSWER Publication 9285.7-01B, December 1991.

39. *Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part C - Risk Evaluation of Remedial Alternatives)*, U.S. EPA, Office of Emergency and Remedial Response, Publication 9285.7-01C, October, 1991.

40. *Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part D - Standardized Planning, Reporting, and Review of Superfund Risk Assessments)*, U.S. EPA, Office of Emergency and Remedial Response, Publication 9285.7-47, December 2001.

41. *Risk Assessment Guidance for Superfund: Volume III - Part A, Process for Conducting Probabilistic Risk Assessment*, U.S. EPA, OSWER Publication 9285.7-45, EPA-540-R-02-002, December 2001.

42. *Policy for Use of Probabilistic in Risk Assessment at the U.S. Environmental Protection Agency*, U.S. EPA, Office of Research and Development, 1997.

43. *Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors*, U.S. EPA, OSWER Directive 9285.6-03, March 25, 1991.

44. *Exposure Factors Handbook*, Volumes I, II, and III, U.S. EPA, EPA/600/P-95/002Fa,b,c, August 1997.

45. *Supplemental Guidance to RAGS: Calculating the Concentration Term*, U.S. EPA, OSWER Publication 9285.7-08I, May 1992.

46. *Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities*, U.S. EPA, OSWER Directive 9355.4-12, EPA/540/F-94/043, July 14, 1994.

47. *Clarification to the 1994 Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities*, U.S. EPA, OSWER Directive 9200.4-27, EPA/540/F-98/030, August 1998.

48. *Guidance Manual for the Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children*, U.S. EPA, OSWER Publication 9285.7-15-1, February 1994; and associated, clarifying Short Sheets on IEUBK Model inputs, including but not limited to OSWER

9285.7-32 through 34, as listed on the OSWER lead internet site at www.epa.gov/superfund/programs/lead/prods.htm.

49. *Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children*, Version 0.99D, NTIS PB94-501517, 1994 or *Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children*, Windows© version, 2001,

50. *Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions*, U.S. EPA, OSWER Directive 9355.0-30, April 22, 1991.

51. *Performance of Risk Assessments in Remedial Investigation /Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)*, OSWER Directive No. 9835.15, August 28, 1990.

52. *Supplemental Guidance on Performing Risk Assessments in Remedial Investigation Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)*, OSWER Directive No. 9835.15(a), July 2, 1991.

53. *Role of Background in the CERCLA Cleanup Program*, U.S. EPA, OSWER 9285.6-07P, April 26, 2002.

54. *Soil Screening Guidance: User's Guide*, U.S. EPA, OSWER Publication 9355.4-23, July 1996.

55. *Soil Screening Guidance: Technical Background Document*, U.S. EPA, EPA/540/R95/128, May 1996.

56. *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites* (Peer Review Draft), U.S. EPA, OSWER Publication 9355.4-24, March 2001.

57. *Ecological Risk Assessment Guidance for Superfund: Process for Designing & Conducting Ecological Risk Assessments*, U.S. EPA, OSWER Directive 9285.7-25, EPA-540-R-97-006, February 1997.

58. *Guidelines for Ecological Risk Assessment*, U.S. EPA, EPA/630/R-95/002F, April 1998.

59. *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments*, U.S. EPA, OSWER Publication 9345.0-14, EPA/540/F-01/014, June 2001.

60. *Ecotox Thresholds*, U.S. EPA, OSWER Publication 9345.0-12FSI, EPA/540/F-95/038, January 1996.

61. *Issuance of Final Guidance: Ecological Risk Assessment and Risk Management Principles for Superfund Sites*, U.S. EPA, OSWER Directive 9285.7-28P, October 7, 1999.

62. *Guidance for Data Useability in Risk Assessment (Quick Reference Fact Sheet)*, OSWER 9285.7-05FS, September, 1990.

63. *Guidance for Data Useability in Risk Assessment (Part A)*, U.S. EPA, Office of Emergency and Remedial Response, Publication 9285.7-09A, April 1992.

64. *Guide for Conducting Treatability Studies Under CERCLA*, U.S. EPA, EPA/540/R-92/071a, October 1992.

65. *CERCLA Compliance with Other Laws Manual, Two Volumes*, U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9234.1-01 and -02, EPA/540/G-89/009, August 1988.

66. *Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites*, U.S. EPA, Office of Emergency and Remedial Response, (Interim Final), OSWER Directive No. 9283.1-2, EPA/540/G-88/003, December 1988.

67. *Considerations in Ground-Water Remediation at Superfund Sites and RCRA Facilities - Update*, U.S. EPA, OSWER Directive 9283.1-06, May 27, 1992.

68. *Methods for Monitoring Pump-and-Treat Performance*, U.S. EPA, EPA/600/R-94/123, June 1994.

69. *Pump-and-Treat Ground-Water Remediation A Guide for Decision Makers and Practitioners*, U.S. EPA, EPA/625/R-95/005, July 1996.

70. *Ground-Water Treatment Technology Resource Guide*, U.S. EPA, OSWER, EPA-542-B-94/009, September 1994.

71. *Land Use in the CERCLA Remedy Selection Process*, U.S. EPA, OSWER Directive No. 9355.7-04, May 25, 1995.

72. *Reuse Assessments: A Tool To Implement The Superfund Land Use Directive*, U.S. EPA, OSWER 9355.7-06P, June 4, 2001.

73. *Reuse of CERCLA Landfill and Containment Sites*, U.S. EPA, OSWER 9375.3-05P, EPA-540-F-99-015, September 1999.

74. *Reusing Superfund Sites: Commercial Use Where Waste is Left on Site*, U.S. EPA, OSWER 9230.0-100, February 2002.

75. *Covers for Uncontrolled Hazardous Waste Sites*, U.S. EPA, EPA/540/2-85/002, 1985.

76. *Technical Guidance Document: Final Covers on Hazardous Waste Landfills and Surface Impoundments*, U.S. EPA, OSWER, EPA/530-SW-89-047, July 1989.

77. *Engineering Bulletin: Landfill Covers*, U.S. EPA, EPA/540/S-93/500, 1993.

78. *Principles for Managing Contaminated Sediment Risks at Hazardous Waste Sites*, U.S. EPA OSWER Directive 9285.6-08, February 12, 2002.

79. *Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups*, U.S. EPA, OSWER 9355.0-74FS-P, EPA/540-F-00-005, September 29, 2000.

80. *Health and Safety Requirements of Employees Employed in Field Activities*, U.S. EPA, Office of Emergency and Remedial Response, EPA Order No. 1440.2, July 12, 1981.

81. *OSHA Regulations in 29 CFR 1910.120*, Federal Register 45654, December 19, 1986.

82. *Standard Operating Safety Guides*, PB92-963414, June 1992.

83. *Community Relations in Superfund: A Handbook*, U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9230.0#3B June 1988; and OSWER Directive No. 9230.0-3C, January 1992.

84. *Technical and Regulatory Guidance for the Triad Approach: A New Paradigm for Environmental Project Management*, December 2003).

United States Environmental Protection Agency

Office of Enforcement and Compliance Assurance (2201A)
EPA 300-F-03-001 May 2003

ENCLOSURE F

U. S. EPA Small Business Resources

If you own a small business, the United States Environmental Protection Agency (EPA) offers a variety of compliance assistance and tools to assist you in complying with federal and state environmental laws. These resources can help you understand your environmental obligations, improve compliance and find cost-effective ways to comply through the use of pollution prevention and other innovative technologies.

Hotlines, Helplines and Clearinghouses

EPA sponsors approximately 89 free hotlines and clearinghouses that provide convenient assistance regarding environmental requirements.

The National Environmental Compliance Assistance Clearinghouse provides quick access to compliance assistance tools, contacts, and planned activities from the U.S. EPA, states, and other compliance assistance providers: http://www.epa.gov/clearinghouse

Pollution Prevention Clearinghouse
http://www.epa.gov/opptintr/library/ppicindex.htm

EPA's Small Business Ombudsman Hotline can provide a list of all the hot lines and assist in determining the hotline best meeting your needs:
(800) 368-5888

Emergency Planning and Community Right-To-Know Act
(800) 424-9346

National Response Center (to report oil and hazardous substance spills)
(800) 424-8802

Toxics Substances and Asbestos Information
(202) 554-1404

Safe Drinking Water
(800) 426-4791

Stratospheric Ozone and Refrigerants Information
(800) 296-1996

Clean Air Technology Center
(919) 541-0800

Wetlands Helpline
(800) 832-7828

EPA Websites

EPA has several Internet sites that provide useful compliance assistance information and materials for small businesses. If you don't have access to the Internet at your business, many public libraries provide access to the Internet at minimal or no cost.

EPA's Home Page
http://www.epa.gov

Small Business Assistance Program
http://www.epa.gov/ttn/sbap

Office of Enforcement and Compliance Assurance
http://www.epa.gov/compliance

Compliance Assistance Home Page
http://www.epa.gov/compliance/assistance

Office of Regulatory Enforcement
http://www.epa.gov/compliance/civil/index.html

Office of Site Remediation Enforcement
http://www.epa.gov/compliance/cleanup

Innovative Programs for Environmental Performance
http://www.epa.gov/partners

Small Business Ombudsman
www.sba.gov/ombudsman

Recycled/Recyclable
Printed with Soy/Canola Ink on paper that contains at least 30% post consumer fiber

Compliance Assistance Centers

In partnership with industry, universities, and other federal and state agencies, EPA has established national Compliance Assistance Centers that provide Internet and "faxback" assistance services for several industries with many small businesses. The following Compliance Assistance Centers can be accessed through the Center's gateway at http://www.assistancecenters.net or by calling the phone numbers below and at their respective websites:

Metal Finishing
(1-800-AT-NMFRC or www.nmfrc.org)

Printing
(1-888-USPNEAC or www.pneac.org)

Automotive Service and Repair
(1-888-GRN-LINK or www.ccar-greenlink.org)

Agriculture
(1-888-663-2155 or www.epa.gov/agriculture)

Printed Wiring Board Manufacturing
(1-734-995-4911 or www.pwbrc.org)

The Chemical Industry
(1-800-672-6048 or www.chemalliance.org)

The Transportation Industry
(1-888-459-0656 or www.transource.org)

The Paints and Coatings Center
(1-800-286-6372 or www.paintcenter.org)

Three new centers are under development for the auto salvage sector, the construction industry, and U.S. Mexican border waste issues.

State Agencies

Many state agencies have established compliance assistance programs that provide on-site and other types of assistance. Contact your local state environmental agency for more information. For assistance in reaching state agencies, call EPA's Small Business Ombudsman at (800)-368-5888 or visit the Small Business Environmental Homepage at http://www.smallbiz-enviroweb.org/state.html.

Compliance Incentives

EPA provides incentives for environmental compliance. By participating in compliance assistance programs or voluntarily disclosing and promptly correcting violations, businesses may be eligible for penalty waivers or reductions. EPA has two policies that potentially apply to small businesses: The Audit Policy (http://www.epa.gov/compliance/incentives/auditing) and the Small Business Policy (http://www.epa.gov/compliance/incentives/smallbusiness). These do not apply if an enforcement action has already been initiated.

Commenting on Federal Enforcement Actions and Compliance Activities

The Small Business Regulatory Enforcement Fairness Act (SBREFA) established an ombudsman ("SBREFA Ombudsman") and 10 Regional Fairness Boards to receive comments from small businesses about federal agency enforcement actions. The SBREFA Ombudsman will annually rate each agency's responsiveness to small businesses. If you believe that you fall within the Small Business Administration's definition of a small business (based on your North American Industry Classification System (NAICS) designation, number of employees or annual receipts, defined at 13 C.F.R. 121.201; in most cases, this means a business with 500 or fewer employees), and wish to comment on federal enforcement and compliance activities, call the SBREFA Ombudsman's toll-free number at 1-888-REG-FAIR (1-888-734-3247).

Every small business that is the subject of an enforcement or compliance action is entitled to comment on the Agency's actions without fear of retaliation. EPA employees are prohibited from using enforcement or any other means of retaliation against any member of the regulated community because the regulated community previously commented on its activities.

Your Duty to Comply

If you receive compliance assistance or submit comments to the SBREFA Ombudsman or Regional Fairness Boards, you still have the duty to comply with the law, including providing timely responses to EPA information requests, administrative or civil complaints, other enforcement actions or communications. The assistance information and comment processes do not give you any new rights or defenses in any enforcement action. These processes also do not affect EPA's obligation to protect public health or the environment under any of the environmental statutes it enforces, including the right to take emergency remedial or emergency response actions when appropriate. Those decisions will be based on the facts in each situation. The SBREFA Ombudsman and Fairness Boards do not participate in resolving EPA's enforcement actions. Also, remember that to preserve your rights, you need to comply with all rules governing the enforcement process.

EPA is disseminating this information to you without making a determination that your business or organization is a small business as defined by Section 222 of the Small Business Regulatory Enforcement Fairness Act (SBREFA) or related provisions.

EXHIBIT C

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
OPEN DUMP INSPECTION REPORT

County DuPage Site Code 0430300024

Location/Name Downers Grove / Bison Gear Date 4-19-91

Time: From 11:15 A.M. To 12:00 P.M. Region DuPage

Photos Taken: Yes (# 8) No (___) RP's phone # 708-968-6400

Inspector(s) Keith Trychta Weather Cloudy 45°

Samples Taken: Yes (#___) No (X) Type ___

Interviewed David Cohn Previous Inspection None

Previous Correspondent None

SITE OBSERVATION

Causing or allowing litter (Section 21(q)(1) of the Act) ..... 1. X

Causing or allowing scavenging operations (Section 21(q)(2) of the Act) ..... 2. ___

Causing or allowing open burning (Section 21(q)(3) of the Act) ..... 3. ___

Causing or allowing the deposition of waste in standing or flowing waters (Section 21(q)(4) of the Act) ..... 4. ___

Causing or allowing proliferation of disease vectors (Section 21(q)(5) of the Act) ..... 5. ___

Causing or allowing the generation of standing or flowing liquid discharge from the open dump site (Section 21(q)(6) of the Act) ..... 6. X

Causing or allowing the operation of an open dump so as to cause or threaten or allow the emissions of contaminants so as to cause or tend to cause air pollution in Illinois (Section 9(a) and 9(c) of the Act) ..... 7. ___

Causing or allowing the operation of an open dump so as to cause or threaten or allow the discharge of any contaminants so as to cause water pollution in Illinois (Section 12(a) and 12(d) of the Act) ..... 8. X

Acceptance of special waste for disposal, storage or treatment from a waste hauler that does not have a valid waste hauling permit (Section 809.302(a) of the Regulations) ..... 9. ___

RECEIVED
26 APR 1991
IEPA/DLPC

B1 00448

Acceptance of special waste for disposal, storage or treatment from a waste hauler that did not present a signed manifest which designated the receiver's facility as a destination for the special waste (Section 809.302(a) of the regulations) ..... 10.____

Causing or allowing the development and/or operation of a solid waste management site without a permit issued by the Agency (Sections 807.201 and 807.202 of the Regulations) ..... 11.____

Causing or allowing the open dumping of any waste (Section 21(a) of the Act) ... 12. X

Conducting any waste-storage, waste-treatment, or waste-disposal operation without a permit granted by the Agency (Section 21(d) of the Act) ..... 13.____

Apparent violation of: PCB ( ); Circuit Court ( )
Case Number _____, Order entered on _____ , 19__ ..... 14.____

Other ..... 15.____

INFORMATIONAL NOTES

1. Reference to "Act" herein refer to the Illinois Environmental Protection Act: Ill. Rev. Stat. ch. 111 1/2, par. 1001, et seq.

2. Reference to "Regulations" herein refer to the rules and regulations of the Illinois Pollution Control Board: 35 Ill. Adm. Code, Subtitle G.

3. Statutory and regulatory references herein are provided for convenience only and should not be construed as legal conclusions of the Agency or as limiting the Agency's statutory or regulatory powers.

4. Subject to enforcement either by administrative citation under Section 31.1 of the Act or by complaint under Section 31 of the Act.

Signature of IEPA Inspector(s)
DuPage County

PMP:jab/3208j/22-23

SKD

9430000162

B1 00449

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

NARRATIVE INSPECTION REPORT DOCUMENT

Date of Inspection: 4-19-91 Inspector: Keith Trychta

Site Code: 0430300024 County: DuPage

Site Name: Downers Grove / Bison Gear Time: 11:15am to 12:00pm

GENERAL REMARKS

Weather Conditions: Cloudy 45°, Weather conditions were not affecting observed conditions.

I arrived at the Bison Gear & Engineering Corp. property (2424 Wisconsin Ave, Downers Grove) at 11:15am. I proceeded to the North end of the Building to observe general conditions. A large concrete slab was observed at the North End of the Building. The concrete slab was used for storage of materials derived from the manufacturing process within the Building. A Row of Drums was observed at the back (North) edge of the Concrete Pad (see Diagram). The Drums contain metal shavings from the manufacturing process. Also on the Concrete Pad were Two waste oil Storage Tanks (see diagram). The Concrete pad contained a sump manhole which acts as a drainage and storage Reservoir for spilled or leaking oil/Liquid. — NOTE: The sump manhole was observed to be filled to capacity. Additional liquid or oil would create an overflow of liquid off the concrete pad. — Adjacent to the Concrete Pad to the West is a large dumpster/container which is used to contain metal shavings. Photo's # 1 and 7 show conditions on the Concrete Pad.

-OVER-

IL 532-0218 (Rev. 8/83) Pg. 1

B1 00450

Directly to the West of the Concrete slab exists an area containing oil/fuel saturated soil. (SEE Diagram) The Area is the drainage area for any oil/fuel spills/leaks/overflows generated on the concrete pad and the metal shavings container. This area is distinguishable from the rest of the property. The area is blackened due to the saturated oil/fuel in the soil. No vegetative cover exists within the area of concern. Photo's # 1 to 8 show observed conditions.

Line item # 1 - Causing or allowing litter. The Agency views the improper disposal or open dumping of any material as litter.

Line item # 6 - Causing or allowing the generation of standing or flowing liquid discharge from the open dump site.
The Agency recognizes the possibility & probability that open dumped material has flowed offsite.

Line Item # 8 - Causing or allowing the operation of an open dump so as to cause or threaten or allow the discharge so as to cause water pollution in Illinois.
The Agency recognizes the potential threat of water pollution due to improper waste disposal practices on site.

Line Item # 12 - Causing or allowing the open dumping of any waste.

over
↓

B1 00451

After observing General Conditions within the Area of concern, I met with David Cohn of Bison Gear. Mr. Cohn stated that he was aware of the conditions existing on the North side of the Building. He stated that he had received quotes from several environmental specialist companies for the Remediation of the Area of concern. I stated to Mr. Cohn that Remediation will be required along with documentation of the work. I also stated that preventive practices should be implemented (I.E. Redesign of storage area for waste oils and metal shavings and employee training). I also gave Mr. Cohn some suggestions as to how to initiate cleanup activities in accordance with Agency Reccommendations.

I concluded the inspection at 12:00 pm.

End Narrative

9430000165

GDS:BB:tk:3/2/12(9/18/86)

TL 532-0318
LPG 10 (Rev. 9/86) Pg. 2

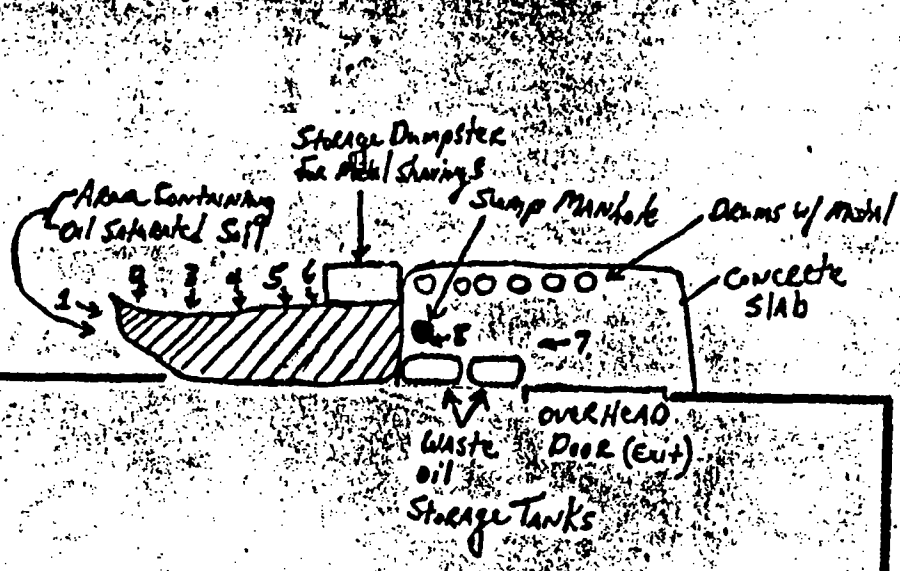
STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

SITE SKETCH

Date of Inspection: 4-19-91 Inspector: Keith Trychta

Site Code: 0 4 3 0 3 0 0 0 2 4 County: DuPage

Site Name: Downers Grove / Bison Gear Time: 11:15 to 12:00 pm



Bison Gear Building

B1 00453

EXHIBIT D

ADMINISTRATIVE WARNING NOTICE
BROUGHT BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF:

Bison Gear & Engineering Corp.
2424 Wisconsin Avenue
Downers Grove, IL 60515

0430300024 - DuPage
Downers Grove/Bison Gear
[illegible]

WARNING: ATTENTION REQUIRED

YOU MAY BE SUBJECT TO A PENALTY OF $1000
IF YOU FAIL TO COMPLY WITH THE TERMS OF THIS
ADMINISTRATIVE WARNING NOTICE

FACTS

On April 19, 1991 an inspection of the Bison Gear property (2424 Wisconsin Avenue, Downers Grove) which you have caused or allowed to be used as an open dump was conducted by Keith Trychta representing the DuPage County Department of Environmental Concerns and the Illinois Environmental Protection Agency (hereinafter "IEPA"). This inspection was conducted in accordance with Section 4 (c) and 4 (d) of the Illinois Environmental Protection Act: Ill. Rev. Stat. 1987, ch. 111 1/2, pars. 1004 (c) and (d). The purpose of this inspection was to determine your compliance with the Illinois Environmental Protection Act and 35 Ill. Adm. Code, Subtitle G, Part 807: Solid Waste and Part 809: Special Waste Hauling Regulations of the Illinois Pollution Control Board.

The attached inspection report specifies the date, time and location of the inspection, along with other relevant information. Items numbered One (1) through Fourteen (14) represent requirements established by the Illinois Environmental Protection Act and/or 35 Ill. Adm. Code, Subtitle G, Parts 807 and 809. At the time of the inspection, apparent violations were identified. The specific apparent violation(s) are identified with an "X" on the attached inspection report.

REQUIRED RESPONSE

You must submit, in writing, within fifteen days of the date of this letter, the reason(s) for the apparent violation(s) noted in the attached inspection report. Also, describe in detail, the corrective action which has been or will be taken to rectify the apparent violation(s) noted in the inspection report. PLEASE REFERENCE THE IEPA DESIGNATED FACILITY NUMBER AND FACILITY NAME ASSIGNED ABOVE ON ANY CORRESPONDENCE CONCERNING THIS MATTER.

RECEIVED

IEPA/DLPC

CORRECTIVE ACTION REQUIRED

IF YOU WISH TO AVOID FURTHER ADMINISTRATIVE OR LEGAL ENFORCEMENT, YOU MUST INITIATE THE FOLLOWING CORRECTIVE ACTIONS:

1. Immediately cease all open dumping of waste oils/fuels on the subject site.

2. Remove all waste to an IEPA permitted landfill. For any waste that you remove from the site to a permitted landfill, you must save receipts from that landfill and submit copies to the IEPA.

3. Submit documentation to the IEPA through a certified environmental engineering company, that all contaminated material was properly identified and removed.

You are given 60 days from April 24, 1991 to complete the corrective action. The deadline is June 24, 1991. A re-inspection by Agency personnel will be conducted to verify compliance.

POTENTIAL SANCTIONS

Be advised that if the attached inspection report alleges violations subject to the administrative citation process, pursuant to Ill. Rev. Stat. 1987, ch.111 1/2, par. 1031.1, this Agency may, WITHOUT FURTHER NOTICE, cause an administrative citation to be filed with the Pollution Control Board if the requirements specified in this Administrative Warning Notice are not satisfied. Please be advised that each and every finding of an administrative citation violation requires a mandatory fine of $500.00 per violation. Notwithstanding the fact that an administrative citation may be filed, you are expected to respond to this letter in order to describe the steps you have or will take to correct all of the violations noted in the inspection report and to outline a proposal for action to insure that the alleged violations will not reoccur.

You are hereby further advised that noncompliance with the requirements of the Illinois Environmental Protection Act and rules and regulations adopted thereunder may result in the following:

1. The filing of an enforcement action with the Pollution Control Board pursuant to Ill. Rev. Stat.1987, ch. 111 1/2, par. 1041 et seq., and in particular, Ill. Rev. Stat. 1987, ch. 111 1/2, par. 1041; or

2. The filing of a civil action in circuit court pursuant to Ill. Rev. Stat, 1987, ch. 111 1/2, par. 1042.

Potential sanctions for the legal actions described above include, but are not limited to: Assessment of civil penalties in accordance with Ill. Rev. Stat. 1987, ch. 111 1/2, par. 1042, which provides for a maximum civil penalty not to exceed $10,000.00 for said violation, and an additional civil penalty not to exceed $1,000.00 for each day during which violation continues, an order to cease and desist from further violations, remedial action, the posting of a security instrument to assure correction of an adjudicated violation, and restraining and injunctive orders.

GENERAL INFORMATION

Your written response and one copy of all documents submitted in response to this letter should be sent to:

Steven K. Dunn
Solid Waste Administrator
DuPage County Department of
Environmental Concerns
421 N. County Farm Road
Wheaton, IL 60187

Should you have any questions concerning this Administrative Warning Notice or need further assistance, contact Faith Trychta at 682-7130.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: Steven K. Dunn
Solid Waste Administrator

Date: April 22, 1991

CERTIFIED MAIL #P 462 728 540

SKD:lw

cc: Todd Marvel/Springfield
Laura Tavares/Maywood
Gretta Tameling/SAC
File

EXHIBIT E

TSC

TESTING SERVICE CORPORATION

Subsurface Exploration
Geotechnical Engineering
Construction Materials Engineering & Testing
Environmental Engineering
Geosciences & Hydrogeologic Studies
Monitoring Wells

Carol Stream, IL

June 7, 1991

Mr. Dave Cohn
BISON GEAR
2424 Wisconsin Avenue
Downers Grove, Illinois 60515

RE: L - 29,970
OIL SPILL REMEDIATION
Bison Gear Facility
Downers Grove, Illinois

Dear Mr. Cohn:

This report presents the results of environmental services recently performed by Testing Service Corporation (TSC) in connection with the above referenced facility. Soil boring and analytical sampling work was performed on April 23, 1991 has been previously reported in our letter dated May 8, 1991. This report documents work performed in the interim since that date.

During the remediation of this site, the role of Testing Service Corporation has been to visually observe the removal of contaminated soil, monitor the excavation with a photoionization meter and collect soil samples which were submitted by the client for laboratory analysis. These observations have been documented during two site visits and are reported below.

On May 29, 1991 an Environmental Geologist from Testing Service Corporation (TSC) visited the site. On that date, visibly stained soil was excavated from the effected area with a model 955 Cat track vehicle and a small front-loader rubber-tired tractor (Bobcat). The material was loaded on dump-type tractor trailers licensed for Special Waste transportation. Century Contractors served as the excavators and M & R Wrecking was employed to transport the contaminated soil.

Excavation of soil began in the western portion of the site near Boring B-2 as outlined on the enclosed Boring Location Plan. The excavation proceeded eastward and extended to the edge of a concrete pad used for the storage of chemicals and metal cuttings. The excavated soil indicated readings of 100-300 ppm deflection on the HNu. Visually stained and odorous soil was removed to a depth of 1 to 4 feet in an area approximately 25 x 50 feet square. Following soil removal, HNu readings were taken to verify that sufficient material had been removed. HNu readings of the walls and base of the excavation over to the pad ranged from 3-5 ppm.

After removing the majority of the contaminated material, excavation of the pit wall adjacent to the concrete pad revealed contamination around a sump located below the pad. The pad was undercut and contaminated soil was removed from beneath the concrete pad using the Bobcat bucket to the maximum extent of the equipment. Additional visibly stained soil was then removed from around the sump manually using

457 EAST GUNDERSEN DR. CAROL STREAM, ILLINOIS 60188-2492 FAX (708) 653-2729

a shovel. Initial HNu meter readings indicated contaminated soil beneath the concrete slab at 175 ppm. The exposed wall face was left open to vent the volatile elements to the atmosphere. This volatilization process was aided by the use of a fan blowing air across the exposed face. Volatile Organic concentrations dropped to 20-75 ppm within an hour after exposure to air.

It was suggested by the TSC Environmental Geologist that the face of the excavation be allowed to remain exposed for a period of time to facilitate additional volatilization. The representative of the Illinois Environmental Protection Agency concurred with this recommendation and the excavation was left open.

The excavation was again inspected by an Environmental Geologist from our office using an HNu meter on May 31, 1991. On that date, HNu readings of the material beneath the concrete pad had decreased to levels ranging from 5-20 ppm with the majority of areas indicating concentrations of 8-10 ppm. The excavation was left open to allow further volatilization of organic compounds.

Thank you for the opportunity to have assisted you with this project. Please call if there are any questions or if we may be of further service.

Respectfully Submitted,

TESTING SERVICE CORPORATION

Prepared by,

Bruce Poynor, Senior Engineering Geologist
Vice President

Brian Walker
Environmental Geologist

Enclosures: Boring Location Plan

LAW OFFICES

BLOCK CARON & LYON

PHONE (847) 945-8810
FAX (847) 945-8812

790 ESTATE DRIVE
SUITE 180
DEERFIELD, ILLINOIS 60015

ADDITIONAL OFFICE
CHICAGO

March 29, 2004

Thomas J. Krueger
Assistant General Counsel
United States Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

Re - delivered
-> Tom
1/12/05

Re: 2424 Wisconsin Avenue, Downers Grove, Illinois

Dear Tom:

Enclosed are copies of two environmental reports prepared by Carlson Environmental, Inc., Chicago, Illinois, which the current owner received in connection with its 1997 purchase of the property (then occupied by Bison Gear): (1) a Phase I Environmental Assessment dated November 11, 1996; and (2) a Limited Subsurface Soil Investigation dated December 12, 1996.

I am working with Johnine Brown, our environmental counsel, whose contact information is as follows:

Johnine J. Brown
Law Offices of Johnine J. Brown
836 West Ancona Street
Chicago, IL 60622
Ph: 312-829-0754
Fx. 312-829-0758

Johnine is the primary contact on this matter. However, please copy me on all correspondence.

Regarding the EPA's request to obtain the owner's consent to access the property, please contact Johnine Brown and copy me. As I mentioned earlier, I would appreciate that you prepare a more limited consent than the form that was initially forwarded to the owner.

Please call me with any questions.

Very truly yours,
BLOCK CARON & LYON LLP

Michael M. Caron

MMC:ees

cc: Ken Morency (w/o encl)
Nancy Wagner (w/o encl)

{2540-006 R7188/}

CARLSON ENVIRONMENTAL, Inc.

COPY

PHASE I ENVIRONMENTAL ASSESSMENT

2424 Wisconsin Avenue
Downers Grove, Illinois

Prepared for
Hinshaw & Culbertson

Prepared by
CARLSON ENVIRONMENTAL, INC.
312 West Randolph Street
Suite 300
Chicago, Illinois 60606
(312) 346-2140

Project No. 9442A
November 11, 1996

Melanie L. Luna
Environmental Technician

Edward E. Garske
Vice President of Operations

CARLSON ENVIRONMENTAL, Inc.

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 SITE DESCRIPTION 1
- 2.1 Location 1
- 2.2 Configuration 1
- 2.3 Physical Features/Topography/Geology 2
- 2.4 Utilities 2
- 2.5 Current Operations 2
- 2.6 Adjacent Land Use 3
- 2.7 History of the Site and Surrounding Area 3

3.0 USE AND STORAGE OF RAW MATERIALS AND CHEMICALS 4

4.0 WASTE GENERATION 5
- 4.1 Air Emission Sources 5
- 4.2 Waste Water Discharges/Storm Water 5
- 4.3 Solid Waste 5
- 4.4 Hazardous and Chemical Waste 6
- 4.5 Used Oil 6

5.0 UNDERGROUND STORAGE TANKS (USTs) 6

6.0 PCB-CONTAINING FLUIDS 7

7.0 WETLANDS 7

8.0 ASBESTOS-CONTAINING BUILDING MATERIALS (ACBM) 8

9.0 REGULATORY DATABASE REVIEW 10
- 9.1 CERCLIS/NPL/State List Sites 11
- 9.2 RCRA Notifiers 11
- 9.3 LUST Incidents/Adjacent USTs 12
- 9.4 Landfills/Solid Waste Disposal Sites 14
- 9.5 ERNS Hazardous Materials Spills 15

TABLE OF CONTENTS (Continued)

10.0 SUMMARY AND CONCLUSIONS 15
10.1 On-Site Issues 15
10.2 Off-Site Issues 16

ATTACHMENT A - Site Photographs
ATTACHMENT B - Copies of Aerial Photographs
ATTACHMENT C - Sanborn Search Report
ATTACHMENT D - Disposal Manifests
ATTACHMENT E - Asbestos Laboratory Report
ATTACHMENT F - Database Report
ATTACHMENT G - Freedom of Information Act (FOIA) Report and Requests

1.0 INTRODUCTION

At the request of Hinshaw & Culbertson, Carlson Environmental, Inc. (CEI) completed a Phase I Environmental Assessment of the following site:

2424 Wisconsin Avenue
Downers Grove, Illinois

This Phase I Environmental Site Assessment was conducted in accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: *Phase I Environmental Site Assessment Process* E 1527-94.

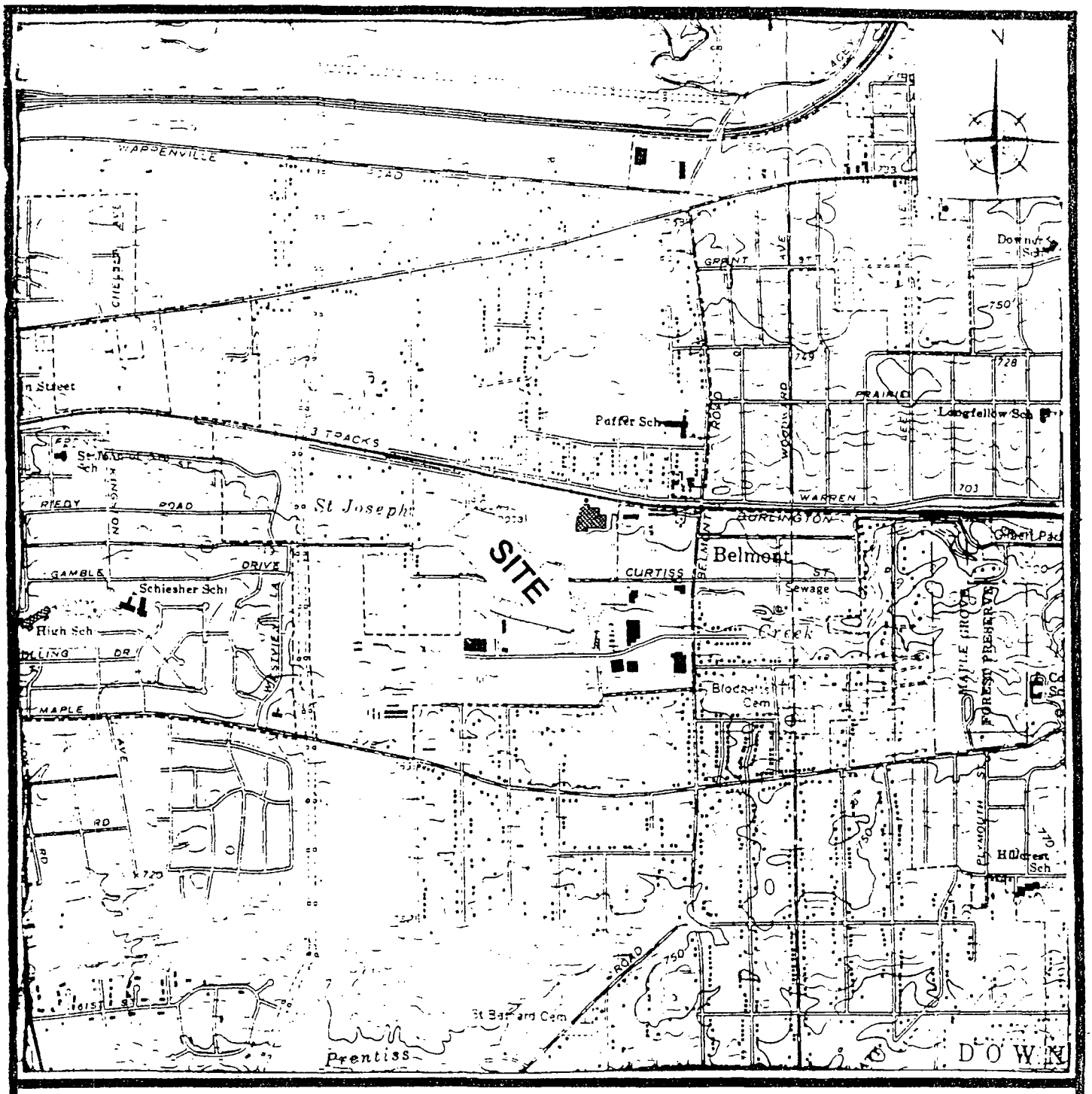
The purpose of this Assessment was to determine if past or present uses of the site indicate the potential for soil or ground water contamination, or if other environmental conditions might affect future uses of the site. The assessment was based upon a visual inspection of the site and information from environmental agencies. No previous environmental assessment reports for the site were made available to CEI. The findings included in this report are based on visual observations noted during the time and date of this site assessment and should not be extrapolated to future dates.

On November 6, 1996, Melanie Luna and Valerie Farrell of CEI conducted a visual inspection of the site. Mr. Roger Daley, Manufacturing Manager for Bison Gear & Engineering, accompanied CEI on the site visit. This is a report of CEI's findings.

2.0 SITE DESCRIPTION

2.1 Location - The site is located at 2424 Wisconsin Avenue, DuPage County, Illinois (Figure One, based on United States Geological Survey 7.5 Minute Series Topographic Map, Wheaton Quadrangle). The subject site is located on the north side of Wisconsin Avenue between Belmont Road and Walnut Avenue.

2.2 Configuration - The site covers approximately 4.0 acres and contains one building, asphalt-paved parking areas an undeveloped area and a gravel-covered area (Figure Two) (Attachment A, Photograph 1). The rectangular, one-story slab-on-grade structure has concrete construction. The site building has both office and warehouse areas. The office has a reception area, a cafeteria and a laboratory which contain 2-foot by 4-foot suspended ceiling tile and both carpet and 1-foot by 1-foot floor tile. The reception area contains linoleum flooring. The warehouse area has an exposed steel beam ceiling and a concrete floor. A machine shop, maintenance department, assembly



SCALE 1:24000

CONTOUR INTERVAL 5 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

CARLSON ENVIRONMENTAL, INC.

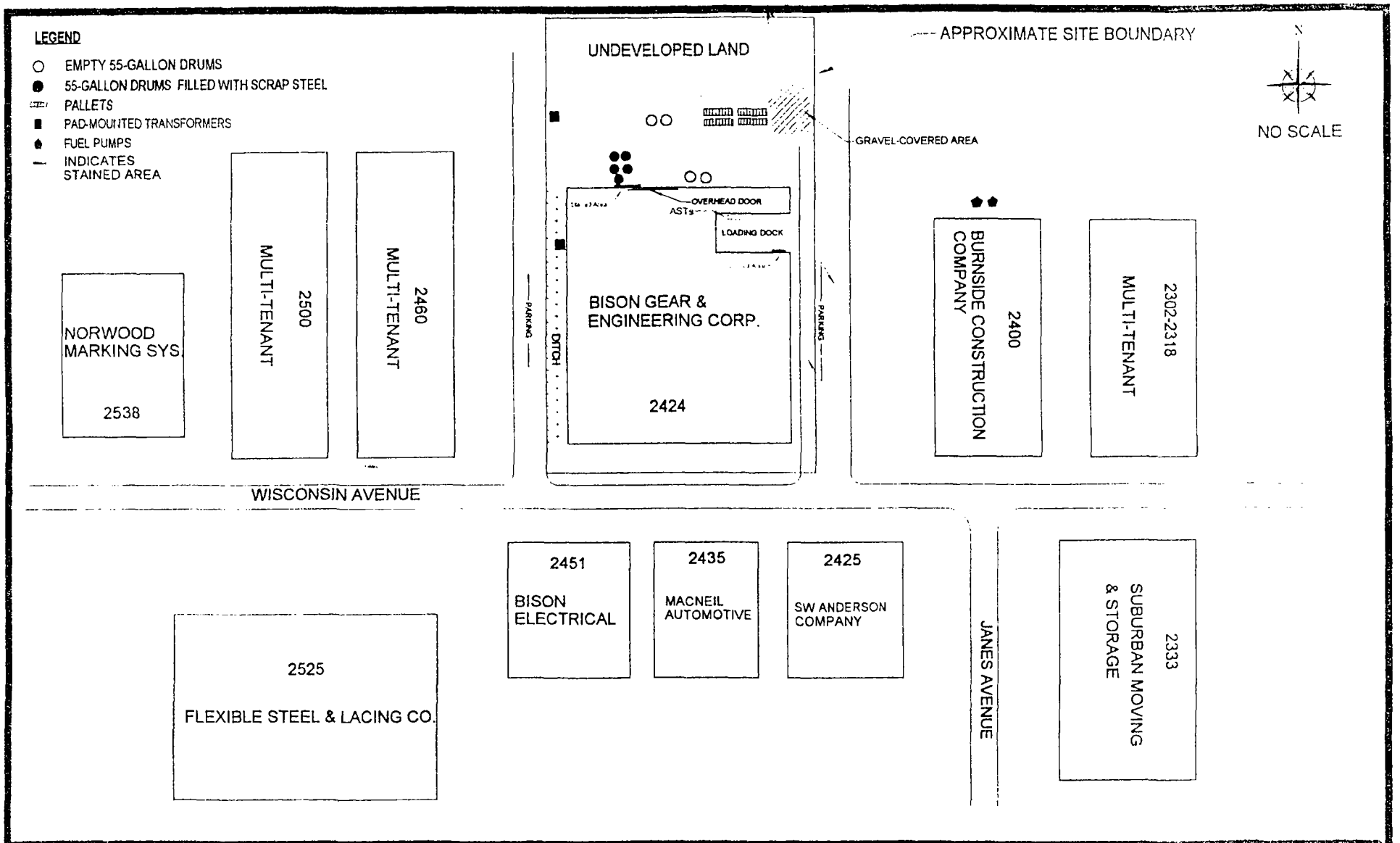
312 West Randolph Street

Chicago, Illinois 60606

(312) 346-2140

FIGURE ONE
SITE LOCATION

Developed from U.S.G.S. 7.5 Minute Topographic Quadrangle Map referenced in Text



CARLSON ENVIRONMENTAL, INC.
312 WEST RANDOLPH STREET
CHICAGO, ILLINOIS 60606
(312) 346-2140

FIGURE TWO
SITE CONFIGURATION
BISON GEAR & ENGINEERING CORP.
Downers Grove, Illinois

Drawn By: MLL	Project No. 9442A	Scale No Scale
Checked By:	Date 11/07/96	Size A

department and a paint room make up the warehouse area. The offices located in the warehouse area contain 2-foot by 4-foot ceiling tile and 1-foot by 1-foot floor tile.

Asphalt-paved parking areas surround the site building. To the north is undeveloped land which contains trees, shrubs and trash. In addition, a gravel-covered area is located on the north side of the parking area.

CEI observed staining along the south wall of the loading dock where the air compressor's discharge is located and near two Aboveground Storage Tanks (ASTs) . The staining travels west to catch basins which are reportedly cleaned out on a regular basis (Attachment A, Photograph 2).

CEI observed staining outside the north wall of the site building in the vicinity of the drum storage area (Attachment A, Photograph 3).

2.3 Physical Features/Topography/Geology - The topography of the site area is relatively flat. The site building appears to be approximately 3 feet lower in elevation than surrounding properties to the west. Storm water in the area appears to flow towards the storm water collection drains located in the site parking area.

The general geology on which the subject site is located consists of greater than 50 feet thick, relatively impermeable silty or clayey till. Sand or gravel deposits have not been identified within the upper 50 feet of sediments in this area. These glacial sediments consist primarily of Equality Formation deposits of the Wisconsinan Glacial Stage. Equality Formation deposits are lake and offshore deposits of silt and clay, with isolated areas containing sand near shorelines. A thin layer of loess (windblown silt) and modern soil, ranging in thickness from 0 to 2 feet, may mantle the glacial deposits in this area.

At depths greater than 50 feet below ground surface (bgs), these glacial deposits overlie Silurian Age bedrock consisting primarily of dolomite. The Silurian Dolomite bedrock is reported by the Illinois State Geological Survey (ISGS) to be several hundred feet thick in most areas of northeastern Illinois.

2.4 Utilities - The site is supplied with electricity by ComEd and with natural gas by Northern Illinois Gas. Water and sewer services are provided by the Village of Downers Grove. The building is heated by an electric heat-pump system.

2.5 Current Operations - At the time of CEI's inspection, the site was occupied by Bison Gear & Engineering Corporation, which utilizes the facility to manufacture gear

motors. Operations include stamping, milling, painting and assembling of cast steel products to form and ship gear motors.

2.6 Adjacent Land Use - The use of chemicals and raw materials and the generation of waste products at adjacent facilities can potentially impact a site if these materials are not properly managed and migrate onto the subject site. CEI therefore reviewed current land uses around the site to the extent possible during its field inspection. The areas adjacent to the site are depicted on Figure Two and described below.

- North - The subject site is bounded to the north by undeveloped land. Curtiss Street is located further to the north.

- West - The subject site is bounded to the west by a multi-tenant warehouse facility followed by a multi-tenant building. Norwood Marking Systems is located further to the west. These facilities appear to be occupied by various commercial warehouse/distribution companies.

- East - The subject site is bounded to the east by Burnside Construction Company followed by a multi-tenant warehouse facility. Belmont Road is located further to the east.

  CEI observed two gasoline pumps located on the north side of Burnside Construction Company located immediately adjacent to and east of the subject site.

- South - The subject site is bounded to the south by Wisconsin Avenue followed by Bison Gear Electrical and Macniel Automotive. Flexible Steel Lacing, Co., is located to the southwest. S.W. Anderson Co. is located southeast followed by Janes Avenue. Suburban Moving & Storage is located further to the southeast.

2.7 History of the Site and Surrounding Area - CEI developed a history of the site based upon the following information:

- United States Geological Survey 7.5 Minute Series Topographic Map, Wheaton, Illinois Quadrangle, 1980.

- Aerial photographs (Township 38 North, Range 10 East, Section 12) for the years 1951, 1963, 1970, 1980 and 1990 (Attachment B).

- Interview with Mr. Roger Daley, Manufacturing Manager, Bison Gear & Engineering Corporation.

CEI requested Sanborn Fire Insurance Maps for the subject site, however according to the Sanborn Company, no Sanborn Maps exist for this property. This suggests that the area surrounding the site was not developed in the early to mid-1900s (Attachment C).

According to Mr. Daley, the building was constructed in approximately 1977.

According to the 1951 aerial photograph, the subject property is shown as undeveloped land. The properties to the north, south, east and west of the subject site are shown as undeveloped land. Belmont Avenue is present and on the aerial.

According to the 1963 aerial photograph, the subject property remains unchanged. Wisconsin Avenue, Walnut Road and Janes Avenue are present. The properties to the north, east and west remain unchanged. Properties to the northwest are occupied by commercial buildings. Commercial buildings appear to be present further to the west and to the east of the subject property. The property to the south appears to be undergoing construction while a commercial building is present to the southeast.

According to the 1970 aerial photograph, the subject property remains unchanged. The properties to the east, west and north remain unchanged. Commercial buildings are present and located to the south and southeast.

According to the 1980 aerial photograph, the subject site is present and properties to the north, west and east are occupied by commercial buildings and several parking lots appear to be undergoing construction. With the exception of one building expanding in size, the properties to the south appear unchanged.

According to the 1990 aerial, the subject site and the properties located to the north, west and east appear to be in the same general configuration as observed during CEI's site visit. With the exception of one additional commercial building, the properties to the south appear unchanged.

3.0 USE AND STORAGE OF RAW MATERIALS AND CHEMICALS

At the time of CEI's inspection, the use and storage of raw materials and chemicals at the site consisted primarily of a variety of lubricants, paints/enamels and solvents stored in various containers. The types of materials observed at the site include:

- Several, 55-gallon drums of Rockcut #107, a specialty oil
- Several, 10-gallon drums of grease
- Several, 55-gallon drums of paint and lacquer
- Several, 55-gallon drum of paint thinner
- Several 55-gallon drums of cutting oil and production oil
- Soap and water mixture used in parts cleaner

CEI noted staining on the concrete floor surrounding the drums containing oils/lubricants, grease, and paints. All chemicals are stored directly on the concrete floor without secondary containment at various locations throughout the facility.

4.0 WASTE GENERATION

4.1 Air Emission Sources - The facility operates one paint booth. According to Mr. Daley, DuPage County does not require the facility to operate under an air permit based on the quantity of Volatile Organic Matter (VOM) emitted. DuPage County allows for 35 pounds of VOM to be emitted per year and according to Mr. Daley, Bison emits a total of 15 pounds of VOM per year. The subject site is not listed in FINDS.

4.2 Waste Water Discharges/Storm Water - CEI observed one source of process waste water discharge at the site. The soap and water mixture used in a parts cleaner is reportedly cleaned and emptied every other week. The mixture is discharged to the combined sanitary/storm sewer. According to Mr. Daley, no permit is required.

Storm water in the area appears to flows towards the storm water collection drains located in the parking area and surrounding streets.

4.3 Solid Waste - Solid waste generated at the subject site consists of packing wastes, office wastes, waste water with coolant and oil and scrap metal. Solid waste is collected in a solid waste dumpster located in the parking lot on the northwest side of the site property and transported off-site by Browning Ferris Industries (BFI) to a nearby sanitary landfill. The paper goods are collected in a separate dumpster and transported off-site by BFI to be recycled. According to Mr. Daley, paint filters generated from the paint booth are placed in the dumpster in plastic bags

Bison Gear & Engineering Corporation generates non-hazardous used waste water with coolant and oil. The waste water is stored in two 500-gallon ASTs located in the loading dock area. Disposal arrangements are made by Beaver Oil Co., Inc. on a quarterly basis.

The facility generates scrap metal from stamping/turning operations at the site. Scrap metal is stored outside in open 55-gallon drums on the north side near the warehouse overhead doors (Attachment A, Photograph 3). Disposal arrangements are made by Cozzi approximately every two weeks.

4.4 Hazardous and Chemical Wastes - Hazardous waste as defined under the Federal Resource Conservation and Recovery Act (RCRA) is subject to regulation if more than 100 kilograms are generated in any single month.

According to the database, as described in Section 9.2, the subject site is listed as a large-quantity RCRA generator. The EPA identification number for the subject site is ILD064387905. According to the database, the subject site generates ignitable wastes (D001).

Bison Gear & Engineering Corporation generates hazardous paint wastes. Disposal arrangements are made by Clean Harbors approximately every 12 to 14 months. Approximately 20, 55-gallon drums of the paint wastes are stored in the loading dock area. According to the waste manifest the paint is an ignitable waste (F003). A copy of the most recent disposal manifest is included in Attachment D.

CEI observed staining surrounding the drums of paint wastes in the loading dock area (Attachment A, Photograph 4).

4.5 Used Oil - Used oil is generated at the site during routine facility operations. Used oil is stored in 55-gallon drums and stored in the loading dock area (Attachment A, Photograph 4).

According to Mr. Daley, all forklifts and company vehicles are serviced off-site.

5.0 UNDERGROUND STORAGE TANKS (USTs)

CEI inspected the site for evidence of underground storage tanks (USTs) such as vent pipes, fill pipes, pump islands or fuel gauges. There was no evidence of USTs at the site. The site representatives had no knowledge of USTs on the subject site. CEI

reviewed the database information for the site (refer to Section 9.3) and found no record of registered USTs at the site.

CEI called the Village of Downers Grove Fire Prevention Bureau requesting additional information regarding USTs at the subject property. According to Kurt Vandahm, there are no USTs listed at the subject property.

CEI notes, two gasoline pumps were observed on the north side of Burnside Construction Company, 2400 Wisconsin Avenue located immediately adjacent to and east of the subject site.

According to Mr. Jim Stepka of the Downers Grove Fire Prevention Bureau, three tanks were removed from the 2400 Wisconsin Avenue site in approximately 1992. These tanks were the property of Suburban Moving & Storage and were replaced with two new tanks following the removal and remediation.

6.0 PCB-CONTAINING FLUIDS

Common sources of polychlorinated biphenyl (PCB) contamination are transformers and electrical equipment that contain PCB dielectric fluids. CEI observed two pad-mounted transformers located east of the site building. There were no stains or evidence of a release in the areas surrounding these transformers. This equipment is the property of ComEd, which is responsible for the maintenance of the equipment and for any malfunction or contaminant release.

CEI observed two air-cooled transformers located inside the warehouse area.

The capacitors in the fluorescent light ballasts located in the buildings may contain small quantities of PCBs. If the ballasts are leaking, disposal is regulated under the Toxic Substances Control Act (TSCA) and must comply with the provisions outlined in 40 CFR Part 761. If more than 1 pound of PCB-containing fluids are to be disposed of at one time (typically between 12-16 ballasts), disposal is regulated under provisions of CERCLA. However, if the ballasts are not leaking and the quantity of PCB-containing oils will not exceed 1 pound, no disposal regulations apply.

7.0 WETLANDS

The discharge of dredge and fill materials into wetlands is regulated by the U.S. Army Corps of Engineers (COE) and the United States Environmental Protection Agency (US

EPA) under Section 404 of the Clean Water Act. In identifying wetlands subject to regulation, the COE and the US EPA consider three criteria:

- The presence of plants that have the ability to subsist in anaerobic soil conditions (hydrophytic plants).
- The presence of soils which have developed under conditions where soil oxygen is limited by saturation with water during long periods of the growing season (hydric soils).
- Evidence of flooding or soil saturation during the growing season.

A determination as to whether or not regulated wetlands exist on the site would require a separate study under COE guidelines. That is beyond the scope of this assessment. However, CEI reviewed the National Wetlands Inventory (NWI) map for this area (Wheaton, Illinois Quadrangle, May, 1983). NWI maps are produced from high altitude infrared photographs, soil and topographic maps, and site visits, and identify potential wetlands that are 0.5 acres or larger. The NWI map does not show any potential wetlands (greater than 0.5 acres in size) on or adjacent to the site. CEI observed no evidence of potential wetlands on the subject site.

CEI also reviewed the relevant Flood Insurance Rate Maps (FIRM), as published by the Federal Emergency Management Agency. Mapped floodplains can sometimes be indicative of wetland hydrology. CEI reviewed the FIRM Community Panel Number (170204 0005 B) for the area. The site is characterized as Zone C, an area of minimal flooding.

8.0 ASBESTOS-CONTAINING BUILDING MATERIALS (ACBM)

CEI's assessment included a walk-through survey to identify readily observable locations of suspected asbestos-containing building materials (ACBM). A building material is considered to be ACBM if it is composed of more than one percent asbestos; it is considered friable if it can be crumbled or reduced to powder under normal hand pressure. The following building materials were assessed:

- Surfacing Material -- material sprayed or troweled onto surfaces, such as acoustical insulation or fire proofing materials on structural members.
- Thermal System Insulation -- insulation applied to pipes, boilers, tanks and ducts to prevent heat loss or gain or condensation

- Miscellaneous ACBM -- ceiling or floor tiles and siding materials.

CEI collected one sample of potential ACBM observed in the building for asbestos analysis. Sample description and analytical results are presented below. The laboratory report and chain-of-custody form are included in Attachment E.

SAMPLE NUMBER	MATERIAL/LOCATION	PERCENT ASBESTOS[1]
CT-1	2-foot by 4-foot ceiling tile located in front office	ND

ND = no asbestos fibers detected in samples during visual examination by polarized light microscopy (PLM).

[1] For the purpose of this report, CEI assumed that for a sample in which any asbestos is detected by PLM methods, the asbestos content is greater than 1%. Materials containing asbestos in concentrations of 1% or less are *not* subject to regulations. PLM methods are subjective and samples identified by PLM methods as containing up to 10% asbestos may in fact contain less than 1% when analyzed by a more accurate method. Point-counting analysis of samples containing less than 10% asbestos is recommended by the US EPA in order to determine more accurately whether a material contains more than 1% asbestos and is subject to regulations. Please contact CEI to request point-counting analysis of the samples collected during the walk-through survey. One negative analysis of a type of material may not be sufficient to regard the material as a non-asbestos material.

Due to the scope of the assessment, a complete asbestos inspection meeting the standards advocated under ASHARA/AHERA was not conducted at the site. However, CEI's inspectors are certified ASHARA/AHERA inspectors and are experienced in identifying materials likely to contain asbestos. The asbestos survey should be considered to provide an indication of the potential for asbestos-containing material at the site.

Surfacing Materials

CEI did not observe any potential asbestos-containing surfacing materials.

Thermal System Insulation

CEI did not observe any potential asbestos-containing thermal system insulation.

Insulation on piping behind walls could not be observed and should be inspected if these areas become accessible at a later date.

Miscellaneous Materials

CEI observed 2-foot by 4-foot ceiling tiles in the front offices, cafeteria, laboratory and warehouse offices. Sample CT-1 was collected from a 2-foot by 4-foot ceiling tile located in the front office area. Laboratory analysis indicated this sample did not contain asbestos.

CEI observed 1-foot by 1-foot floor tiles located in the cafeteria, laboratory and warehouse offices. In general, the floor tiles appeared in good condition and are not considered friable. If significant deterioration of floor tiles occurs, they can become friable. Dry sanding and other activities which may cause deterioration of the tiles should be avoided.

Roofing materials may contain asbestos. CEI does not sample roofing materials since sampling may damage the integrity of the roof. The roofing in its current condition is not friable and does not constitute a potential health hazard. Roofing materials should be sampled for asbestos prior to any renovation or demolition activity which could affect these materials.

Despite all efforts, in some instances it may not be possible to observe or identify all asbestos-containing material, such as in the case of pipe insulation that is concealed behind a wall, or in the case of floor tiles which are beneath newer floor surfacings, or roofing materials. Such material should be handled in a manner consistent with the regulations if encountered during renovation or demolition activities.

Regulations

Federal regulations (40 CFR 61) require notification to Illinois Environmental Protection Agency (IEPA) prior to demolition or renovation, and ACBM which is friable or could become friable during demolition or removal activities should be removed using the procedures outlined in the regulations if the quantity of material exceeds 260 linear feet, 160 square feet or 35 cubic feet.

9.0 REGULATORY DATABASE REVIEW

Federal, state and local regulatory agencies maintain a number of databases for facilities which manage regulated materials or where chemical releases may have created the potential for cleanup activities. CEI reviewed this database information to determine if the subject sites were listed or if activities at other listed facilities potentially impacted conditions at the sites. Database information was obtained through Environmental Risk

Information & Imaging Services (ERIIS) (ERIIS Report Number: 123155A) and other sources referenced below. A copy of the ERIIS database information, including a map showing identified sites locations, is included in Attachment F.

ERIIS searches various environmental agencies databases to identify sites located within specific distances (on property, adjacent properties, 0.25 mile through 1 mile, etc.) of the subject sites in order to conform to or exceed the standards for database searches outlined in the American Society for Testing and Materials (ASTM) standards for Phase I Environmental Assessments. The ERIIS report indicates the date each database was last updated.

The database lists "unplottable sites" sites whose exact location cannot be determined due to incorrect or incomplete address information. CEI scanned this list of unplottable sites to determine, when possible, if the sites appear to be located in proximity to the subject sites. A listing of the unplottable sites is included with the database information in Attachment F.

9.1 CERCLIS/NPL/State List Sites - CERCLIS is a list of sites which the US EPA or the Illinois Environmental Protection Agency (IEPA) has identified as representing a potential risk to public health, welfare or the environment. Sites listed on CERCLIS are subsequently investigated and scored to identify those that require cleanup activities. Sites with high scores are then listed on the Federal National Priorities List (NPL). The state has identified various sites that may require cleanup activities, either as Immediate Hazardous Waste Removal Projects or Noticed/Pre-Noticed Sites (some of which are cleanups performed on a voluntary basis). The database information indicates the subject site is not listed as a CERCLIS, NPL or a State Listed Site.

According to the database report, there are no NPL or State List Sites located within 1 mile of the subject site or CERCLIS sites within 0.5 miles of the subject site.

9.2 RCRA Notifiers - CEI reviewed database information for facilities in the vicinity of the site that generate, store, dispose of, or transport hazardous waste and notify either the US EPA or IEPA regarding these activities as required under RCRA. The subject site is listed as a large-quantity RCRA notifier. The EPA identification number for the subject site is ILD064387905. According to the database, the subject site generates ignitable wastes (D001). The database identified eleven RCRA generators within 0.25 miles of the site. The nearest three are listed below.

- Principal MFG
  5400 Janes Ave.
  Downer Grove, Illinois

EPA Identification Number: ILD005475694
Small-Quantity Generator
Located approximately 0.03 miles southeast of the subject property.

According to the database, this site generates ignitable wastes (D001).

- Tricon Industries, Inc.
  2325 Wisconsin Ave.
  Downers Grove, Illinois
  EPA Identification Number:ILD005084124
  Small-Quantity Generator
  Located approximately 0.05 miles southeast of the subject property.

According to the database, this site generates ignitable wates (D001), spent halogenated solvents used in degreasing (F001), spent halogenated solvents (F002), wastewater treatment sludges from electroplating operations (F006), spent cyanide plating bath solutions from electroplating operations (F007), plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process (F008), spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (F009), sodium cyanide (NA (CN)) (P106), hydrogen fluoride (U134), and 1,3-pentadiene (U186).

- Clark J. L. Manufacturing Co. Atlas Tube
  2300 Wisconsin Ave.
  Downers Grove, Illinois
  EPA Identification Number: ILD005130000
  Small-Quantity Generator
  Located approximately 0.07 miles southeast of the subject property.

According to the unplottable list, two RCRA generator sites were identified which may be located within 0.25 miles of the site. CEI was unable to determine the exact location of these sites, however, the sites did not appear to be adjacent to the subject property.

ASTM standards also require the identification of RCRA facilities involved in treatment, storage and/or disposal of hazardous waste (TSD facilities) within 1 mile of the site. No TSD facilities were identified within this radius.

9.3 LUST Incidents/Adjacent USTs - CEI reviewed the database listing of reported Leaking Underground Storage Tank (LUST) sites in order to determine whether releases were reported for any properties adjacent to or near the subject site. ASTM standards require the identification of LUST incidents within 0.5 miles of the site.

The subject site is not listed as having a LUST incident, however the database identified six LUST incidents within 0.5 miles of the subject site. The three nearest sites are listed below:

- Suburban Moving & Storage (Currently Burnside Construction Company)
  2400 Wisconsin Avenue
  Downers Grove, Illinois
  LUST Incident Number: 913065
  Located approximately 0.01 miles east of the subject property.

CEI submitted a FOIA request to the IEPA for additional information regarding LUST incidents for the above-referenced site (Attachment G). At the time of this report, this information was not available. CEI will notify the Client when this information becomes available. The Client will then determine whether CEI should obtain and/or review this information.

- Arrow Gear Company
  2301 Curtiss Street
  Downers Grove, Illinois
  LUST Incident Number: 930214
  Located approximately 0.23 miles northeast of the subject property.

- Molex, Inc.
  5224 Katrine Avenue
  Downers Grove, Illinois
  LUST Incident Number: 880876
  Located approximately 0.27 miles northwest of the subject property.

Additional information regarding the status of the LUST incidents and remediation activities, if any, was not provided by the database report.

ASTM also requires the identification of adjacent sites with registered underground storage tanks (USTs). The subject site is not listed as having a registered UST, however the database identified four UST incidents within 0.5 miles of the subject site. The three nearest sites are listed below:

- Suburban Moving & Storage (Burnside Construction Company)
  2400 Wisconsin Avenue
  Downers Grove, Illinois
  Facility Identification Number: 2-002802
  Status: Unresolved
  Number of Tanks: 0

Located approximately 0.01 miles east of the subject property.

During CEI's site visit, two gasoline pumps were observed on the north side of Burnside Construction Company. According to Mr. Jim Stepka of the Downers Grove Fire Prevention Bureau, three tanks were removed from this property in approximately 1992. These tanks were the property of Suburban Moving & Storage and were replaced with two new tanks following the removal and remediation. CEI submitted a FOIA request to the IEPA for additional information regarding UST incidents for the above-referenced site (Attachment G). At the time of this report, this information was not available. CEI will notify the Client when this information becomes available. The Client will then determine whether CEI should obtain and/or review this information.

- Magnatek, Inc. (Suburban Moving & Storage)
  2333 Wisconsin Avenue
  Downers Grove, Illinois
  Facility Identification Number: 2-003084
  Status: Active
  Number of Tanks: 4
  Located approximately 0.05 miles northeast of the subject property.

- Scot, Inc.
  2525 Curtiss Street
  Downers Grove, Illinois
  Facility Identification Number: 2-016273
  Status: Closed
  Number of Tanks: 0
  Located approximately 0.17 miles northeast of the subject property.

According to the unplottable list, there are no LUST incidents or UST sites located within 0.5 miles of the site.

9.4 Landfills/Solid Waste Disposal Sites - CEI reviewed the "Historical Inventory of Solid Waste Disposal Sites in Northeastern Illinois," which maps and lists active and inactive solid waste sites in the Chicago Metropolitan area, as prepared by the Northeastern Illinois Planning Commission (final version published August 18, 1988). The inventory was prepared in part to determine potential threats to ground water in Illinois. According to the database report, no solid waste disposal sites are located within 1 mile of the subject site.

In addition, CEI reviewed the database listings for State Landfills/Solid Waste sites located within 1 mile of the subject site. No state landfills/solid waste sites were identified on the database. According to the unplottable list, there are no state landfill/solid waste sites located within 1 mile of the site.

9.5 ERNS Hazardous Materials Spills - Under the Clean Water Act and CERCLA, individuals or companies which spill oil or hazardous substances in significant quantities must notify the National Response Center. The spill information is maintained on the Emergency Response Notification System (ERNS). The ERNS system dates back to 1987. ERIIS searched the ERNS database for the subject site address. No ERNS listing was identified for the subject site.

10.0 SUMMARY AND CONCLUSIONS

10.1 On-Site Issues - According to Mr. Daley, the site building was constructed in approximately 1977. Prior to construction of the site building, the property was undeveloped. Currently, the site building is occupied by Bison Gear & Engineering Corporation which utilizes the facility to manufacture gear motors. Operations include stamping, painting, and assembly of cast steel and paper products for forming and shipping gear motors.

The subject site is listed as a large-quantity RCRA generator. The EPA identification number for the subject site is ILD064387905. According to the database, the subject site generates ignitable wastes (D001). According to the disposal manifest, the facility generates non-halogenated wastes (F003).

The facility stores scrap metal in several open 55-gallon drums located outside the building. This type of storage requires an NPDES storm water permit under the CWA. Therefore, the facility should either apply for the storm water permit or change the current storage practices so that a permit is not required. CEI recommends that the facility construct a lean-to or a shed to cover the open drums to prevent storm water from entering the containers or store the scrap metal inside the building. According to Mr. Daley, the facility does not have of a storm water permit.

CEI observed staining along the south wall of the loading dock where the air compressor's discharge is located. CEI observed staining along the south wall of the loading dock where the air compressor's discharge is located and near two Aboveground Storage Tanks (ASTs). The staining travels west to catch basins which are reportedly cleaned out on a regular basis. In addition, CEI observed staining outside the north wall

of the site building along the north wall of the warehouse area and loading dock. CEI recommends , that a limited subsurface soil investigation be conducted to determine whether the staining has impacted the subject property.

We have performed this Phase I Environmental Site Assessment of the property in conformance with the scope and limitations of ASTM Practice E 1527. This Assessment has revealed no evidence of *recognized environmental conditions*, with the exception of stained areas in connection with the property.

10.2 Off-Site Issues - The site is located in a commercial area. There was no evidence found during the site inspection or on aerial photographs of improper chemical storage or dumping on the subject site or surrounding properties.

The database identified RCRA generators, registered UST incidents and LUST incidents, within the radii specified for these types of occurrences. In general, the nearest occurrences pose the greatest potential for environmental problems at the subject site. The LUST site, the closest facility identified, is approximately 0.01 miles from the subject property.

This LUST site is located east and immediately adjacent to the subject property, therefore there is a moderate potential for contaminants from this site to impact the subject property. CEI recommends, that a limited subsurface soil investigation be conducted to evaluate this potential and verify that there has been no contamination from off-site sources.

According to Mr. Jim Stepka of the Downers Grove Fire Prevention Bureau, the adjacent facility contained three gasoline tanks that were removed in approximately 1992. These tanks were the property of Suburban Moving & Storage and were replaced with two new tanks following the removal and remediation. CEI notes, Burnside Construction Company occupied 2400 Wisconsin Avenue during the November 6, 1996 site visit.

CEI submitted a FOIA request to the IEPA for additional information regarding the above-referenced sites which pose a potential for concern (Attachment E). At the time of this report, this information was not available. CEI will notify the Client when this information becomes available. The Client will then determine whether CEI should obtain and/or review this information.

We have performed this Phase I Environmental Site Assessment of the property in conformance with the scope and limitations of ASTM Practice E 1527.

CARLSON ENVIRONMENTAL, Inc.

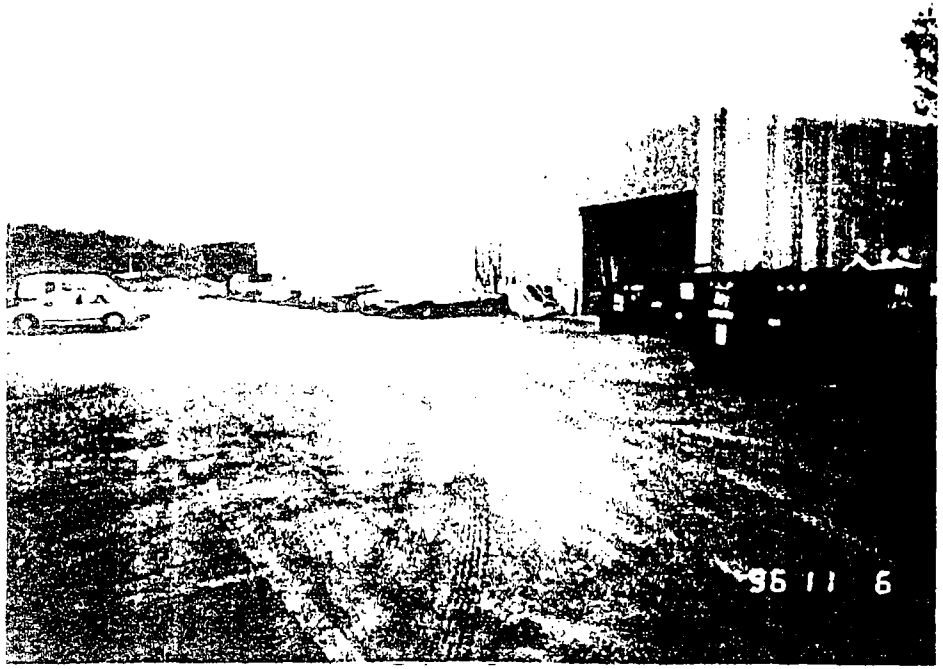
ATTACHMENT A

Site Photographs

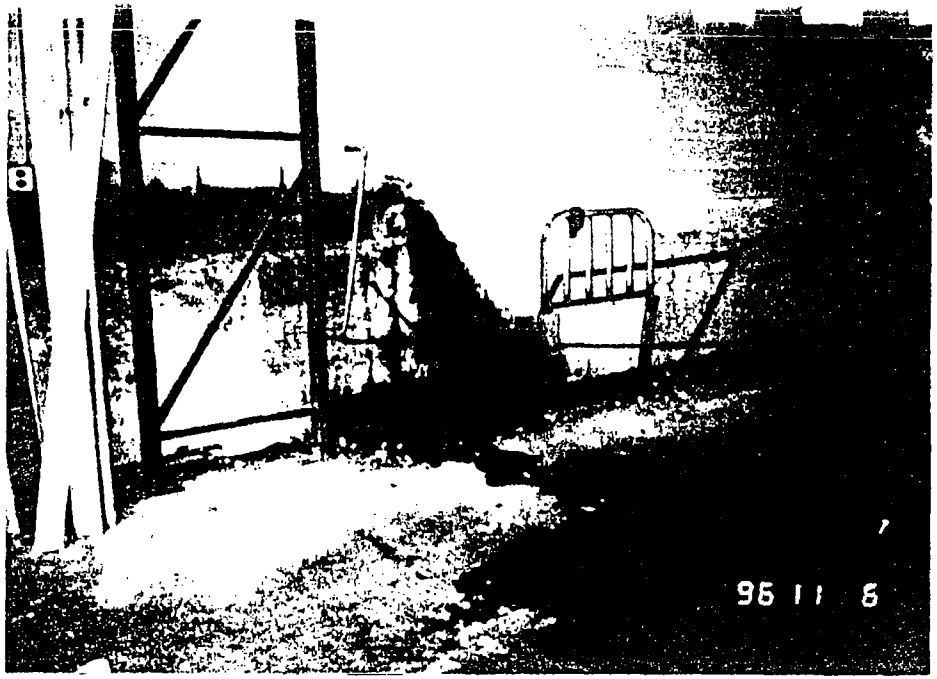
CARLSON ENVIRONMENTAL, Inc.

Photograph Descriptions
2424 Wisconsin Avenue
Downers Grove, Illinois
November 6, 1996

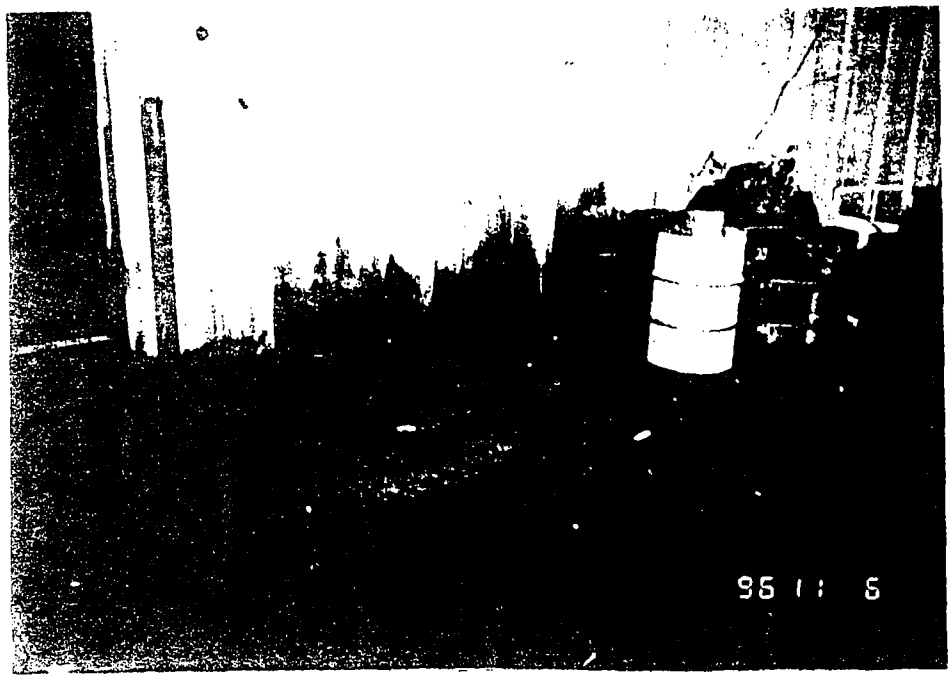
Photograph 1.	Site Building, east side parking lot and loading dock.
Photograph 2.	Staining observed from the compressor's discharge on the south wall of loading dock
Photograph 3.	Staining observed on outside north wall of site building and eight, 55-gallon drums of stored scrap metal.
Photograph 4.	Two, 500-gallon Aboveground Storage Tanks (ASTs) of waste water with coolant and oil and 19, 55-gallon drums of waste paint and related material stored in the loading dock.



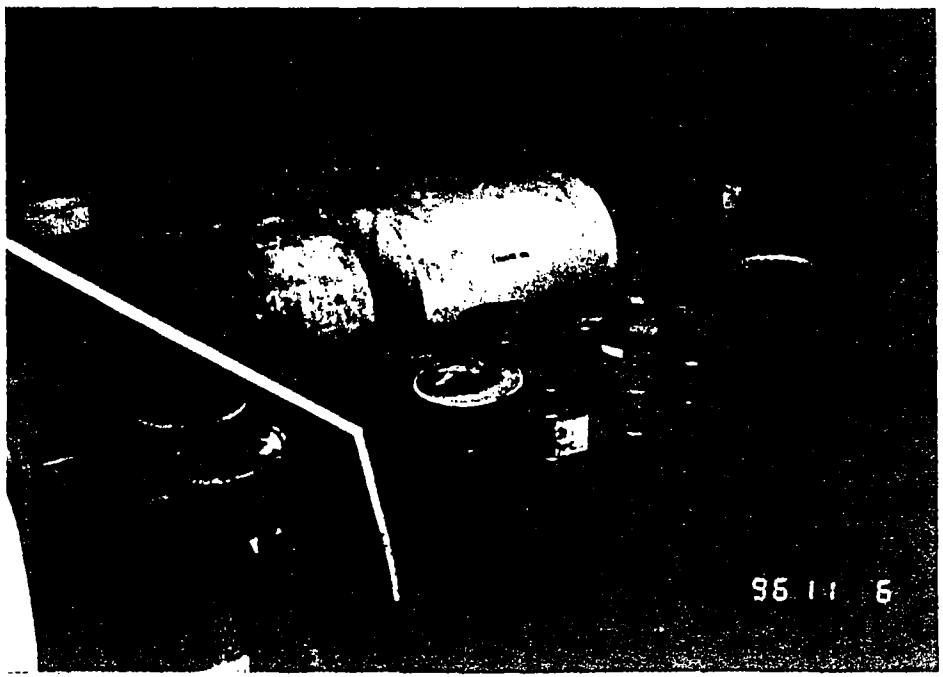
Photograph 1



Photograph 2



Photograph 3

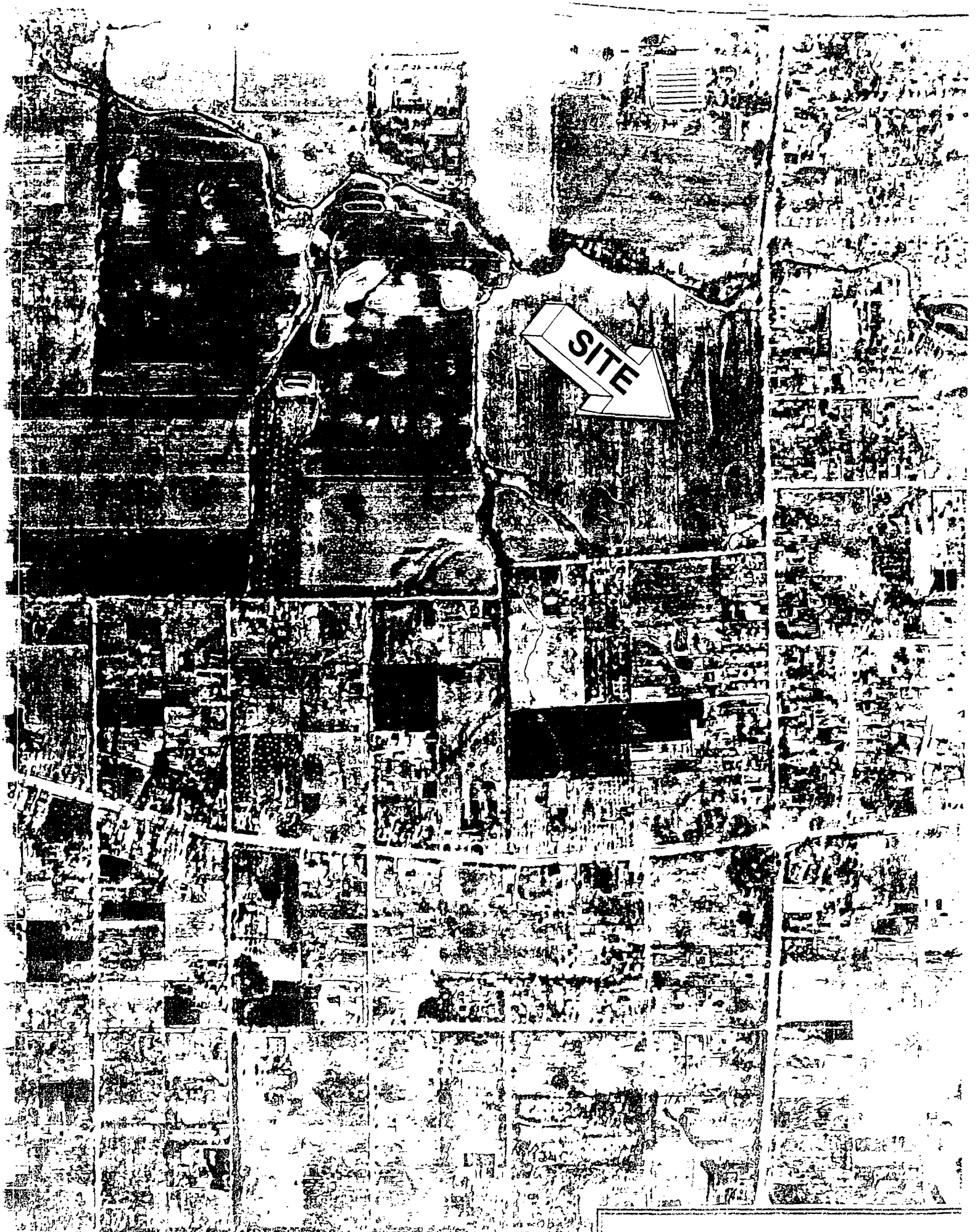


Photograph 4

CARLSON ENVIRONMENTAL, Inc.

ATTACHMENT B

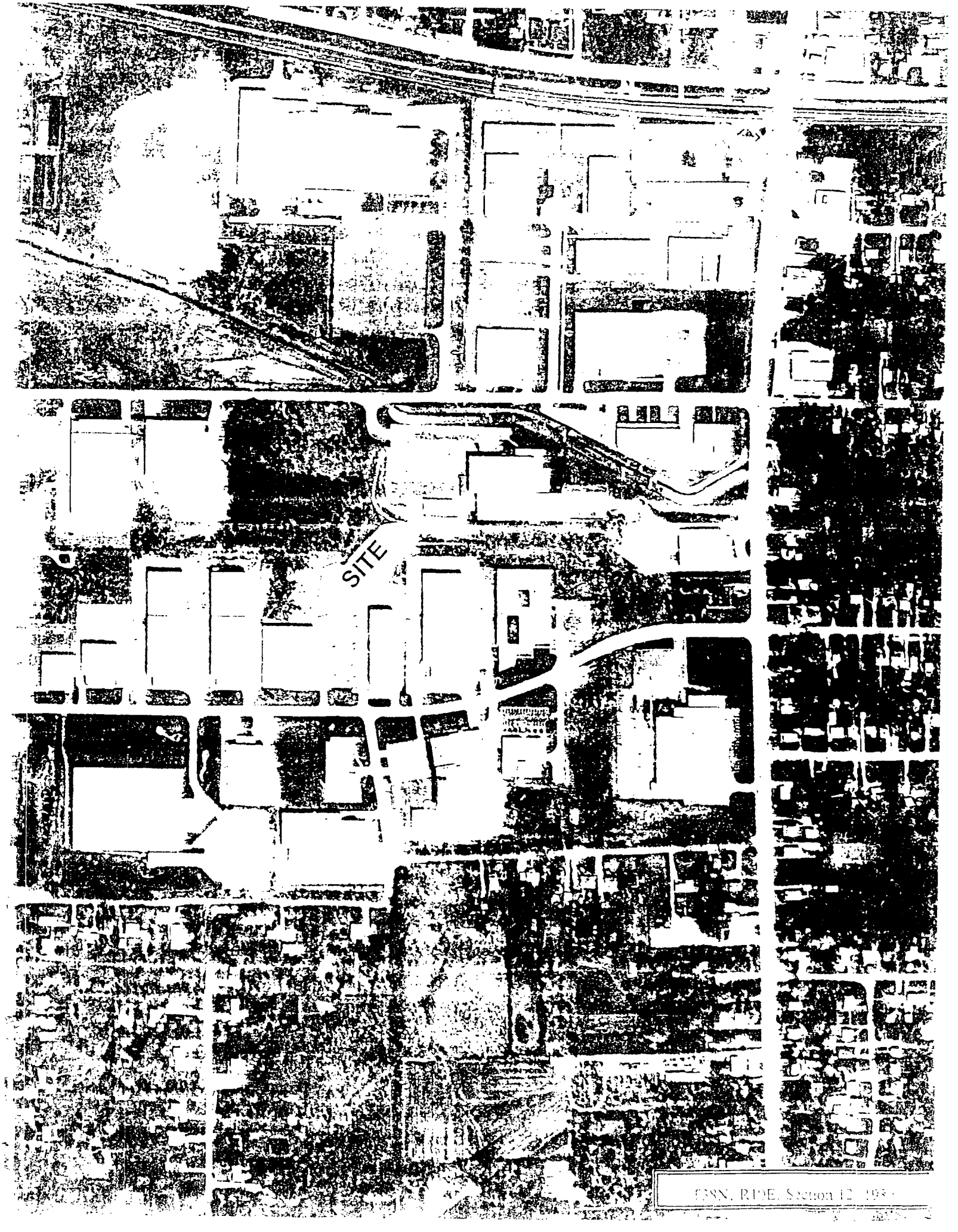
Copies of Aerial Photographs



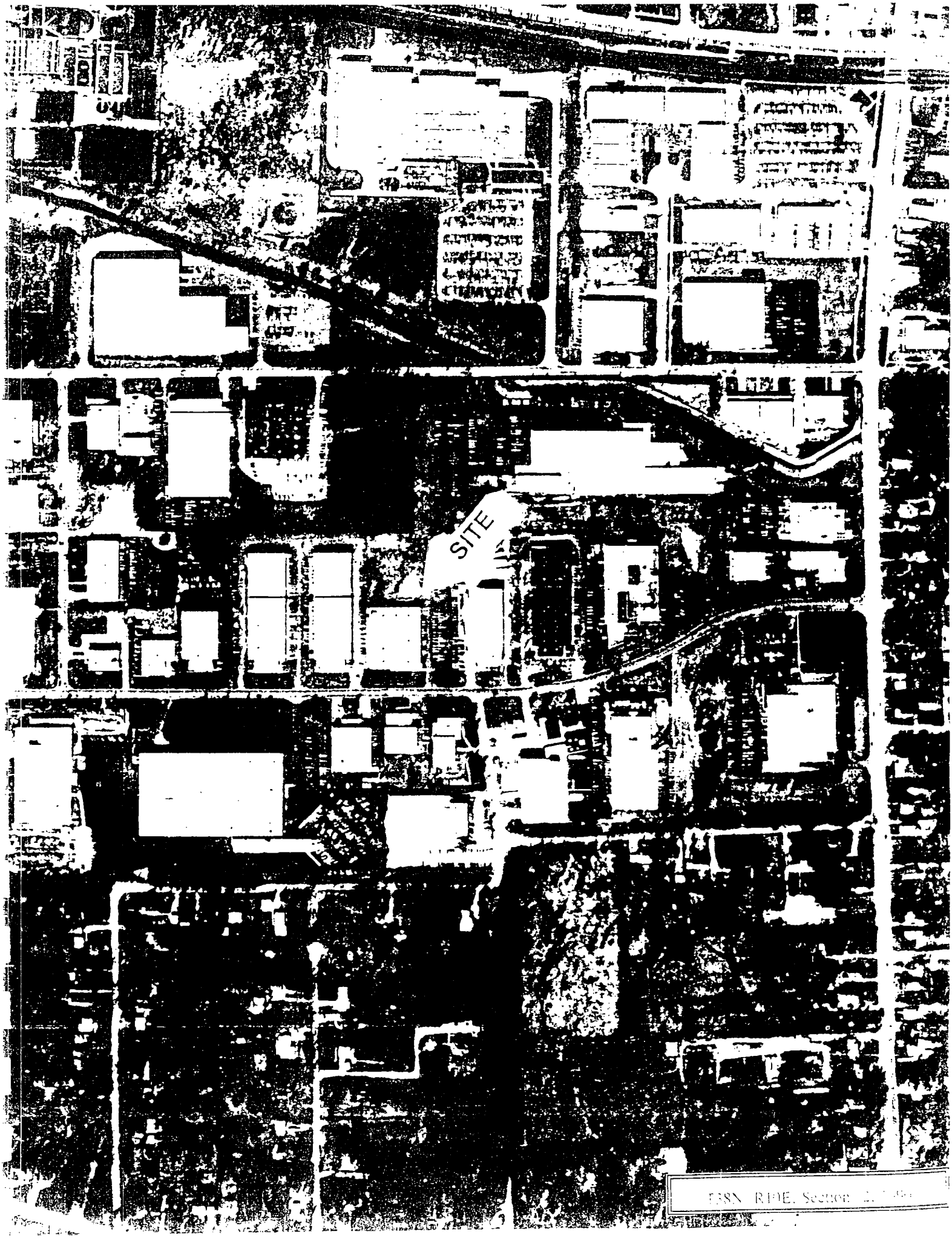
T38N R10E, Section 12, 1951

T38N, R10E, Section 12, 1963

T38N, R10E, Section 12, 1970



T38N, R10E, Section 12, 198



T38N R10E, Section 2

CARLSON ENVIRONMENTAL, Inc.

ATTACHMENT C

Sanborn Search Report

HISTORIC MAP SEARCH

PERTAINING TO:

2424 Wisconsin Street
Downers Grove, IL 60516

REPORT NUMBER: 123155A

No historic maps are available for this site in the ERIIS Historic Map Collection, for the period covering the years 1867-1990

Copyright (c) 1996 by Environmental Risk Information & Imaging Services.
605 Huntmar Park Dr. - Ste 200, Herndon, VA 22070, Ph. (703) 834-0600, 1-800-989-0403, FAX: (703) 834-0606.

CARLSON ENVIRONMENTAL, Inc.

ATTACHMENT D

Disposal Manifests

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ILD06[illegible]

Document No. | of | required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address

Location If Different
BISON GEAR & ENGINEERING CORP
[illegible] WISCONSIN AVE
[illegible] IL [illegible]

4. "24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS" [illegible]

A. Illinois Manifest Document Number: IL 7257621 FEE PAID IF APPLICABLE

B. Illinois Generator's ID: 0 4 3 0 3 0 5 0 3 7

5. Transporter 1 Company Name: [illegible] OIL CO., INC.

6. US EPA ID Number: ILD06[illegible]

C. Illinois Transporter's ID: 0 0 1 4

D. 708 354-4040 Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. Illinois Transporter's ID

F. ( ) Transporter's Phone

9. Designated Facility Name and Site Address

BEAVER OIL CO., INC.
[illegible] LENZI AVENUE
HODGKINS, IL [illegible]

10. US EPA ID Number: ILD06[illegible]

G. Illinois Facility's ID: 0 [illegible] 1 1 2 6 0 0 0 1

H. Facility's Phone: (708) 354-4040

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NOT D.O.T. REGULATED USED OIL WATER	001	TT	00800	C	EPA HW Number XX Authorization Number
b.					EPA HW Number XX Authorization Number
c.					EPA HW Number XX Authorization Number
d.					EPA HW Number XX Authorization Number

J. Additional Description for Materials Listed Above

ITEM A HAS A FLASH POINT ABOVE 200 DEGREES F
EPA CLASSIFICATION FOR ITEM A IS NON-HAZARDOUS.

K. Handling Codes for Wastes Listed Above in Item #14

15. Special Handling Instructions and Additional Information

BISON GEAR & ENGINEERING CORP CL3B29

24 HOUR EMERGENCY PHONE NO: (708) 354-4040

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: [illegible] | Signature: [illegible] | Date: Month Day Year: 10 31 90

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: James Hoyt | Signature: [illegible] | Date: Month Day Year: 10 31 90

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19

Printed/Typed Name | Signature | Date: Month Day Year

This Agency is authorized to require pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021 that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 6. GENERATOR'S COPY

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter) EPA Form 8700-22 (Rev. 6-89) Form Approved OMB No. 2050-0039, Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ILD 064 387 905 — Manifest Document No. [illegible]

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is required by Illinois law

3. Generator's Name and Mailing Address: BISON GEAR AND ENGINEERING, 2424 WISCONSIN AVENUE, DOWNERS GROVE, IL 60515

Location If Different: 1-800-OIL-TANK

4. "24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS"

A. Illinois Manifest Document Number: IL6626945 FEE PAID IF APPLICABLE

B. Illinois Generator's ID: 043 0505 037

5. Transporter 1 Company Name: [illegible] — 6. US EPA ID Number: [illegible] 22250

C. Illinois Transporter's ID: [illegible]

D. Transporter's Phone: [illegible]

7. Transporter 2 Company Name: — 8. US EPA ID Number:

E. Illinois Transporter's ID:

F. ( ) Transporter's Phone:

9. Designated Facility Name and Site Address: CLEAN HARBORS OF CHICAGO, INC., 11800 S. STONEY ISLAND AVE., CHICAGO, IL 60617 — 10. US EPA ID Number: ILD 000 608471

G. Illinois Facility's ID: 031 60000 51

H. Facility's Phone: 312 646-6202

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. WASTE PAINT RELATED MATERIAL ,3# UN1263, PGII	[illegible]	[illegible]	001656		XX 7003
b.					XX
c.					XX
d.					XX

J. Additional Description for Materials Listed Above

K. Handling Codes for Wastes Listed Above in Item #14: G = Gallons Y = Cubic Yard

15. Special Handling Instructions and Additional Information

11a. profile number S41378 (2x55)

[illegible] IL 7551

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: [illegible] — Signature: [illegible] — Date: Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Greg Gochenour — Signature: [illegible] — Date: Month Day Year 06 199

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: — Signature: — Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19

Printed/Typed Name: — Signature: — Date: Month Day Year

This Agency is authorized to require pursuant to Illinois Revised Statute 1989 Chapter 111 1/2 Section 1004 and 1021 that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 6. GENERATOR'S COPY

CARLSON ENVIRONMENTAL, Inc.

ATTACHMENT E

Asbestos Laboratory Report

AIResearch, INC.
2969 N. 114th Street
Wauwatosa, WI 53222
(414) 476-3131
FAX 476-2201

NVLAP Lab No. 101868

BULK SAMPLE ANALYSIS REPORT

16079

CLIENT NAME: Carlson Environmental
312 West Randolph Street
Chicago IL 60606

SAMPLES RECEIVED: 11/07/96
SAMPLES ANALYZED: 11/08/96
ANALYST: Jon Yakish
ANALYST:
LAB MANAGER: Jon Yakish

JOB ID: 9442A-7A
JOB NAME: Bison Gear & Eng.

CLIENT ID	ASBESTOS	NON ASBESTOS FIBER	MATRIX	LAB or CLIENT DESCRIPTION
CT-1	None Observed	35% FG, 35% CE	30% Per GS PT MLM QU	Tan Compressed

CHRY:	Chrysotile	FG:	Fiberous Glass	Ver:	Vermiculite	PL-M:	Paint like material
AMOS:	Amosite	CE:	Cellulose	Per:	Perlite	MLM:	Mixed limestone material
CROC:	Crocidolite	Syn:	Synthetic Fiber	Gyp:	Gypsum	Qu:	Quartz
TREM:	Tremolite	H:	Hair	gs:	Glass shot	Cal:	Calcite
ACTN:	Actinolite	SC:	Silicates	pt:	Particulate	rs:	Resinous material
ANTH:	Anthophyllite	TRC:	Trace=<1%			DE:	Diatomaceous Earth

*sample analyzed as a split sample. Quantitation is by calibrated visual estimation which has an accepted Relative Percent difference of 35. Results reflect condition of specimen and do not imply condition of any other materials. Analysis according to EPA/600/R-93/116 test method using polarized light and dispersion stain technique. This report shall not be reproduced except in full without the written approval of AIResearch, Inc. and shall not be used to claim product endorsement by

CEI

CHAIN-OF-CUSTODY RECORD

No. 7245

CARLSON ENVIRONMENTAL, INC. 312 W. Randolph St. Chicago, IL 60606 (312) 346-2140

PROJ NO. 7442A

PROJECT NAME BISON GEAR & ENGINEERING CO.

SAMPLERS: (Signature) MELANIE L. LUNA [signature]

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS) ASBESTOS								REMARKS
1	CT-1	11/6	1115		✓	2'x4' ceiling tile located in front office.	1	X								
2																
3																
4																
5																
6																
7																
8																
9																
10																

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	11/6/96	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

REMARKS

PLEASE FAX RESULTS TO MELANIE LUNA @ ([illegible]) 346-6956

Please fax results by Friday 11/8/96.

Distribution: White - Accompanies Shipment; Yellow - Laboratory File; Pink - Coordinator Field Files

CARLSON ENVIRONMENTAL, Inc.

ATTACHMENT F

Database Report

SUBJECT PROPERTY: Bison Company
2424 Wisconsin Street
Downers Grove, IL 60516

ORDERED BY: Valerie Farrell

ERIIS DISCLAIMER

The Information contained in the ERIIS Report has been obtained from publicly available data sources and other secondary sources of information produced by entities other than ERIIS. Although reasonable care has been taken by ERIIS in compiling the information contained in the Report, ERIIS disclaims any and all liability for any errors, omissions or inaccuracies in this information. THIS REPORT DOES NOT CONSTITUTE A LEGAL OR PROFESSIONAL OPINION AND IS NOT AN ENVIRONMENTAL RISK AUDIT OR ASSESSMENT. THE DATA AND REPORTS ARE PROVIDED "AS IS". ERIIS MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND WHATSOEVER WITH RESPECT TO THE DATA OR THE REPORTS INCLUDING, BUT NOT LIMITED TO, THEIR CORRECTNESS, COMPLETENESS, CURRENTNESS, FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, NOR ARE SUCH REPRESENTATIONS OR WARRANTIES TO BE IMPLIED WITH RESPECT TO THE DATA OR REPORTS FURNISHED AND ERIIS ASSUMES NO RESPONSIBILITY WITH RESPECT TO THE PURCHASER'S USE THEREOF. ERIIS SHALL HAVE NO LIABILITY, IN CONTRACT, TORT OR OTHERWISE, FOR ANY INACCURACY OR DEFECT OR OMISSION IN PROCURING, COMPILING, COLLECTING, INTERPRETING, REPORTING, COMMUNICATING OR DELIVERING THE REPORTS OR DATA OR ANY OTHER MATTER RELATED TO CUSTOMER'S USE OF THE SERVICE, WITHOUT LIMITING THE GENERALITY OF THE FOREGOING. NONE OF ERIIS, ITS PARTNERS, OFFICERS, EMPLOYEES OR DATA SUPPLIERS SHALL IN ANY EVENT HAVE ANY LIABILITY FOR LOST PROFITS OR FOR ANY OTHER INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE DAMAGES. Each Report is valid only for the geographical parameters and as of the date specified on the cover page of such Report, and any alteration or deviation from the description, or any subsequent use, will require a new Report. In the case of any Data obtained from a Data Supplier, ERIIS will advise the Data Supplier of any inaccuracies reported to it, but can take no responsibility for the accuracy or completeness of the Data provided to the Purchaser under this Agreement.

ERIIS ASTM Detail Radius Statistical Profile

ERIIS Report #123155A Nov 5, 1996

SITE: Bison Company
2424 Wisconsin Street
Downers Grove, IL 60516

Latitude: 41.789578
Longitude: -88.043280

State: IL

DATABASE	RADIUS (MI)	PROPERTY AREA**	PROPERTY-1/4	1/4-1/2	1/2-1	>1	TOTAL
NPL	1.00		0	0	0		0
CERCLIS	0.50		0	0			0
RCRIS_TS	1.00		0	0	0		0
RCRIS_LG	0.25	X	4				4
RCRIS_SG	0.25		7				7
ERNS	0.05		0				0
LRST	0.50		2	4			6
RST	0.25		4				4
SWF	0.50		0	0			0
HWS	1.00		0	0	0		0
NFRAP	0.50		1	0			1
			18	4	0	0	22

Radon Zone Level: 2

Zone 2 has a predicted average indoor screening level >= 2 pCi/L and <= 4 pCi/L

A Radon Zone should not be used to determine if individual homes need to be tested for radon.
The EPA's Office of Radiation and Indoor Air (202/233-9320) recommends that all homes be tested for radon, regardless of geographic location or the zone designation in which the property is located.

**A property is defined as a .02 mile buffer around the site's latitude and longitude.
A blank radius count indicates that the database was not searched by this radius per client instructions.
NR in a radius count indicates that the database cannot be reported by this search criteria due to insufficient and/or inaccurate addresses reported by a federal/state agency.

NPL

Date of Data: 05/01/96
Release Date: 05/13/96
US Environmental Protection Agency
Office of Solid Waste and Emergency Response
703/603-8881

National Priorities List

The NPL Report, also known as the Superfund List, is an EPA listing of uncontrolled or abandoned hazardous waste sites. The list is primarily based upon a score which the site receives from the EPA's Hazardous Ranking System. These sites are targeted for possible long-term remedial action under the Superfund Act of 1980.

CERCLIS

Date of Data: 05/01/96
Release Date: 05/13/96
US Environmental Protection Agency
Office of Solid Waste and Emergency Response
703/603-8730

Comprehensive Environmental Response, Compensation, and Liability Information System

The CERCLIS Database is a comprehensive listing of known or suspected uncontrolled or abandoned hazardous waste sites. These sites have either been investigated, or are currently under investigation by the U.S. EPA for the release, or threatened release of hazardous substances. Once a site is placed in CERCLIS, it may be subjected to several levels of review and evaluation, and ultimately placed on the National Priorities List (NPL). As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from the CERCLIS Database.

RCRIS_TS

Date of Data: 05/10/96
Release Date: 06/10/96
US Environmental Protection Agency
Office of Solid Waste and Emergency Response
202/260-4610

Resource Conservation and Recovery Information System - Treatment, Storage, And Disposal Facilities

The RCRIS_TS Report contains information pertaining to facilities which either treat, store, or dispose of EPA regulated hazardous waste. The following information is also included in the RCRIS_TS Report:
- Information pertaining to the status of facilities tracked by the RCRA Administrative Action Tracking System (RAATS)
- Inspections & evaluations conducted by federal and state agencies
- All reported facility violations, the environmental statute(s) violated, and any proposed & actual penalties
- Information pertaining to corrective actions undertaken by the facility or EPA
- A complete listing of EPA regulated hazardous wastes which are generated or stored on-site

RCRIS_LG

Date of Data: 05/10/96
Release Date: 06/10/96
US Environmental Protection Agency
Office of Solid Waste and Emergency Response
202/260-4610

Resource Conservation and Recovery Information System - Large Quantity Generators

The RCRIS_LG Report contains information pertaining to facilities which either generate more than 1000kg of EPA regulated hazardous waste per month, or meet other applicable requirements of the Resource Conservation And Recovery Act. The following information is also included in the RCRIS_LG Report:
- Information pertaining to the status of facilities tracked by the RCRA Administrative Action Tracking System (RAATS)
- Inspections & evaluations conducted by federal and state agencies
- All reported facility violations, the environmental statute(s) violated, and any proposed & actual penalties
- Information pertaining to corrective actions undertaken by the facility or EPA
- A complete listing of EPA regulated hazardous wastes which are generated or stored on-site

RCRIS_SG
Date of Data: 05/10/96
Release Date: 06/10/96
US Environmental Protection Agency
Office of Solid Waste and Emergency Response
202/260-4610

Resource Conservation and Recovery Information System - Small Quantity Generators

The RCRIS_SG Report contains information pertaining to facilities which either generate between 100kg and 1000kg of EPA regulated hazardous waste per month, or meet other applicable requirements of the Resource Conservation And Recovery Act. On advice of the U.S. EPA, ERIIS does not report so-called "RCRA Protective Filers." Protective Filers, commonly called Conditionally Exempt Small Quantity Generators (CESQG's), are facilities that have completed RCRA notification paperwork, but are not, in fact, subject to RCRA regulation. The determination of CESQG status is made by the U.S. EPA. The following information is also included in the RCRIS_SG Report:
- Information pertaining to the status of facilities tracked by the RCRA Administrative Action Tracking System (RAATS)
- Inspections & evaluations conducted by federal and state agencies
- All reported facility violations, the environmental statute(s) violated, and any proposed & actual penalties
- Information pertaining to corrective actions undertaken by the facility or EPA
- A complete listing of EPA regulated hazardous wastes which are generated or stored on-site

ERNS
Date of Data: 12/31/95
Release Date: 03/18/96
US Environmental Protection Agency
Office of Solid Waste and Emergency Response
202/260-2342

Emergency Response Notification System - 1995

ERNS is a national computer database system that is used to store information concerning the sudden and/or accidental release of hazardous substances, including petroleum, into the environment. The ERNS Reporting System contains preliminary information on specific releases, including the spill location, the substance released, and the responsible party. Please note that the information in the ERNS Report pertains only to those releases that occured between January 1, 1995 and December 31, 1995.

LRST
Date of Data: 07/16/96
Release Date: 07/17/96
IL Environmental Protection Agency
LUST Section
217/524-5907

Illinois Leaking Underground Storage Tank Report

The Illinois Leaking Underground Storage Tank Report is a comprehensive listing of all reported leaking underground storage tanks reported within the State of Illinois.

RST
Date of Data: 05/01/96
Release Date: 06/04/96
Color World of Printing
Office of the State Fire Marshal
217/753-6501

Illinois Underground Storage Tank Report

The Illinois Underground Storage Tank Report is a comprehensive listing of all registered underground storage tanks located within the State of Illinois.

SWF
Date of Data: 08/30/93
Release Date: / /
IL Haz. Waste Research & Info. Center
Land-Based Disposal Sites Program
217/333-8940

Illinois Land-Based Disposal Sites Report

The Illinois Land-Based Disposal Site Report is an inventory of all active and historical waste disposal sites located within the State of Illinois. The inventory includes sites of all types including: municipal, industrial, hazardous, surface impoundments, illegal dumps, landfills, etc. Landfills tracked by the Northeastern Illinois Planning Commission are also included in the LBDS Report.

HWS

Date of Data: 01/01/96
Release Date: 05/10/96
IL Environmental Protection Agency

217/782-3397

Illinois Category List

The Illinois Category List is a summary listing of those facilities that are deemed potentially hazardous by the Illinois Environmental Protection Agency. The Status field indicates which Illinois EPA Program is responsible for regulating the facility.

NFRAP

Date of Data: 05/01/96
Release Date: 05/13/96
US Environmental Protection Agency
Office of Solid Waste and Emergency Response
703/603-8881

No Further Remedial Action Planned Sites

The No Further Remedial Action Planned Report (NFRAP), also known as the CERCLIS Archive, contains information pertaining to sites which have been removed from the U.S. EPA's CERCLIS Database. NFRAP sites may be sites where, following an initial investigation, either no contamination was found, contamination was removed quickly without need for the site to be placed on the NPL, or the contamination was not serious enough to require federal Superfund action or NPL consideration.

If a selected database does not appear on this list, it is not available for the subject property's state.

ERIIS Report #123155A Nov 5, 1996

ERIIS ID. DATABASE	FACILITY ADDRESS COMMENTS	DISTANCE FROM SITE	DIRECTION FROM SITE	MAP ID
	0 - 1/4 Miles			
17007001414 RCRIS_LG	Bison Gear And Engineering Co 2424 Wisconsin Ave Downers Grove, IL 60515-4019 County: Du Page	.000 Mi	SITE	1
17005009041 LRST	Suburban Moving & Storage 2400 Wisconsin Ave Downers Grove, IL 60515-4019 County: Du Page	.010 Mi	NORTHEAST	2
17010012753 RST	Suburban Moving & Storage Co 2400 Wisconsin Ave Downers Grove, IL 60515-4019 County: Du Page	.010 Mi	NORTHEAST	2
17008000778 RCRIS_SG	Principal Mfg 5400 Janes Ave Downers Grove, IL 60515-4234 County: Du Page	.037 Mi	SOUTHEAST	3
17010012722 RST	Magnetek Inc 2333 Wisconsin Ave Downers Grove, IL 60515-4022 County: Du Page	.051 Mi	NORTHEAST	4
17019000363 NFRAR	Suburban Self Storage Facility 2333 Wisconsin Ave Downers Grove, IL 60515-4022 County: Du Page	.051 Mi	NORTHEAST	4
17008000231 RCRIS_SG	Tricon Industries Inc 2325 Wisconsin Ave Downers Grove, IL 60515-4022 County: Du Page	.056 Mi	NORTHEAST	5
17008000407 RCRIS_SG	Clark J L Manufacturing Co Atlas Tube 2300 Wisconsin Ave Downers Grove, IL 60515-4021 County: Du Page	.072 Mi	NORTHEAST	6
17008007583 RCRIS_SG	Heuft Inc 2512 Wisconsin Ave Downers Grove, IL 60515-4230 County: Du Page	.090 Mi	SOUTHWEST	7
17008006422 RCRIS_SG	Cvp Systems Inc 2518 Wisconsin Ave Downers Grove, IL 60515-4230 County: Du Page	.097 Mi	SOUTHWEST	8
17007000302 RCRIS_LG	Flexible Steel Lacing Co 2525 Wisconsin Ave Downers Grove, IL 60515-4241 County: Du Page	.106 Mi	SOUTHWEST	9
17008009123 RCRIS_SG	Norwood Marking Sys 2538 Wisconsin Ave Downers Grove, IL 60515-4230 County: Du Page	.122 Mi	SOUTHWEST	10
17010012742 RST	Scot Inc 2525 Curtiss St Downers Grove, IL 60515-4060 County: Du Page	.175 Mi	NORTHWEST	11
17007000520 RCRIS_LG	Ames Supply Co 2537 Curtiss St Downers Grove, IL 60515-4059 County: Du Page	.177 Mi	NORTHWEST	12

ERIIS ID. DATABASE	FACILITY ADDRESS COMMENTS	DISTANCE FROM SITE	DIRECTION FROM SITE	MAP ID
17007000688 RCRIS_LG	Rexnord Corp Bearing Oper 2400 Curtiss St Downers Grove, IL 60515-4056 County: Du Page	.185 Mi	NORTHEAST	13
17008000210 RCRIS_SG	Arrow Gear Co 2301 Curtiss St Downers Grove, IL 60515-4055 County: Du Page	.230 Mi	NORTHEAST	14
17010012658 RST	Arrow Gear Co 2301 Curtiss St Downers Grove, IL 60515-4055 County: Du Page	.230 Mi	NORTHEAST	14
17005000938 LRST	Arrow Gear Co. 2301 Curtiss St Downers Grove, IL 60515-4055 County: Du Page	.230 Mi	NORTHEAST	14
	1/4 - 1/2 Miles			
17005006722 LRST	Molex Inc. 5224 Katrine Ave Downers Grove, IL 60515-4061 County: Du Page	.272 Mi	NORTHWEST	15
17005001098 LRST	Baker Motor Express Inc. 5355 Walnut Ave Downers Grove, IL 60515-4108 County: Du Page	.435 Mi	NORTHWEST	16
17005003041 LRST	Downers Grove Ice Arena Ltd. Partnership 5501 Walnut Ave Downers Grove, IL 60515-4104 County: Du Page	.475 Mi	SOUTHWEST	17
17005000585 LRST	Amoco Oil Co. 2231 Maple Ave Downers Grove, IL 60515-4404 County: Du Page	.485 Mi	SOUTHEAST	18

ERIIS ID / EPA ID	FACILITY	ADDRESS	MAP ID
17008000778 ILD005475694	Principal Mfg DISTANCE FROM SITE: .037 Miles DIRECTION FROM SITE: Southeast	5400 Janes Ave Downers Grove, IL 60515-4234 County: Du Page	3

Facility Is Not Reported In Raats

HAZARDOUS WASTES:

1.	WASTE CODE:	D001	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		

17008000231 ILD005084124	Tricon Industries Inc DISTANCE FROM SITE: .056 Miles DIRECTION FROM SITE: Northeast	2325 Wisconsin Ave Downers Grove, IL 60515-4022 County: Du Page	5

Facility Is Not Reported In Raats

HAZARDOUS WASTES:

1.	WASTE CODE:	D000	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
2.	WASTE CODE:	D001	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
3.	WASTE CODE:	D002	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
4.	WASTE CODE:	F001	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
5.	WASTE CODE:	F002	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
6.	WASTE CODE:	F006	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
7.	WASTE CODE:	F007	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
8.	WASTE CODE:	F008	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
9.	WASTE CODE:	F009	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
10.	WASTE CODE:	P106	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
11.	WASTE CODE:	U134	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
12.	WASTE CODE:	U186	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
13.	WASTE CODE:	F001	AMOUNT OF WASTE:	1.82500
	SOURCE OF INFO:	Part A		
14.	WASTE CODE:	F002	AMOUNT OF WASTE:	1.82500
	SOURCE OF INFO:	Part A		
15.	WASTE CODE:	F006	AMOUNT OF WASTE:	1.82500
	SOURCE OF INFO:	Part A		
16.	WASTE CODE:	F007	AMOUNT OF WASTE:	1.82500
	SOURCE OF INFO:	Part A		
17.	WASTE CODE:	F008	AMOUNT OF WASTE:	1.82500
	SOURCE OF INFO:	Part A		
18.	WASTE CODE:	F009	AMOUNT OF WASTE:	1.82500
	SOURCE OF INFO:	Part A		
19.	WASTE CODE:	P106	AMOUNT OF WASTE:	.00400
	SOURCE OF INFO:	Part A		
20.	WASTE CODE:	U186	AMOUNT OF WASTE:	4.76200
	SOURCE OF INFO:	Part A		

17008000407 ILD005130000	Clark J L Manufacturing Co Atlas Tube DISTANCE FROM SITE: .072 Miles DIRECTION FROM SITE: Northeast	2300 Wisconsin Ave Downers Grove, IL 60515-4021 County: Du Page	6

Facility Is Not Reported In Raats

ERIIS ID / EPA ID	FACILITY	ADDRESS	MAP ID

HAZARDOUS WASTES:

1. WASTE CODE: F003 AMOUNT OF WASTE: .00000
   SOURCE OF INFO: Notification
2. WASTE CODE: F005 AMOUNT OF WASTE: .00000
   SOURCE OF INFO: Notification

17008007583 Heuft Inc 2512 Wisconsin Ave 7
ILD984820936 DISTANCE FROM SITE: .090 Miles Downers Grove, IL 60515-4230
DIRECTION FROM SITE: Southwest County: Du Page

Facility Is Not Reported In Raats

HAZARDOUS WASTES:

1. WASTE CODE: D001 AMOUNT OF WASTE: .00000
   SOURCE OF INFO: Notification
2. WASTE CODE: F001 AMOUNT OF WASTE: .00000
   SOURCE OF INFO: Notification

17008006422 Cvp Systems Inc 2518 Wisconsin Ave 8
ILD984789776 DISTANCE FROM SITE: .097 Miles Downers Grove, IL 60515-4230
DIRECTION FROM SITE: Southwest County: Du Page

Facility Is Not Reported In Raats

HAZARDOUS WASTES:

1. WASTE CODE: D001 AMOUNT OF WASTE: .00000
   SOURCE OF INFO: Notification

17008009123 Norwood Marking Sys 2538 Wisconsin Ave 10
ILD984848564 DISTANCE FROM SITE: .122 Miles Downers Grove, IL 60515-4230
DIRECTION FROM SITE: Southwest County: Du Page

Facility Is Not Reported In Raats

FACILITY VIOLATIONS:

1. DATE DETERMINED: 10/01/91 DATE RESOLVED: 10/05/92
   AREA OF VIOLATION: Generator-all Requirements

FACILITY EVALUATIONS:

1. EVALUATION DATE: 10/01/91 EVALUATION AGENCY: State
   TYPE OF EVALUATION: Non-financial Record Review
   AREA(S) OF EVALUATION: Generator-all Requirements

FACILITY ENFORCEMENTS:

1. ENFORCEMENT DATE: 12/04/1991 ENFORCEMENT AGENCY: State
   TYPE OF ACTION: Written, Informal Administrative Action
   PENALTY(S):

HAZARDOUS WASTES:

1. WASTE CODE: D001 AMOUNT OF WASTE: .00000
   SOURCE OF INFO: Notification

17008000210 Arrow Gear Co 2301 Curtiss St 14
ILD005075205 DISTANCE FROM SITE: .230 Miles Downers Grove, IL 60515-4055
DIRECTION FROM SITE: Northeast County: Du Page

Facility Is Not Reported In Raats

ERIIS ID EPA ID	FACILITY	ADDRESS	MAP ID

HAZARDOUS WASTES:

1.	WASTE CODE:	D001	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
2.	WASTE CODE:	F001	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
3.	WASTE CODE:	F009	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		

ERIIS ID / EPA ID	FACILITY	ADDRESS	MAP ID
17007001414 ILD064387905	Bison Gear And Engineering Co DISTANCE FROM SITE: .000 Miles DIRECTION FROM SITE: Site	2424 Wisconsin Ave Downers Grove, IL 60515-4019 County: Du Page	1

Facility Is Not Reported In Raats

HAZARDOUS WASTES:

1. WASTE CODE: D001 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification

17007000302 ILD005094230	Flexible Steel Lacing Co DISTANCE FROM SITE: .106 Miles DIRECTION FROM SITE: Southwest	2525 Wisconsin Ave Downers Grove, IL 60515-4241 County: Du Page	9

Facility Is Not Reported In Raats

HAZARDOUS WASTES:

1. WASTE CODE: F001 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification

17009000520 ILD005163811	Ames Supply Co DISTANCE FROM SITE: .177 Miles DIRECTION FROM SITE: Northwest	2537 Curtiss St Downers Grove, IL 60515-4059 County: Du Page	12

Facility Is Not Reported In Raats

HAZARDOUS WASTES:

1. WASTE CODE: U112 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification
2. WASTE CODE: U140 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification
3. WASTE CODE: U159 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification
4. WASTE CODE: U220 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification
5. WASTE CODE: U226 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification

17007000688 ILD005455571	Rexnord Corp Bearing Oper DISTANCE FROM SITE: .185 Miles DIRECTION FROM SITE: Northeast	2400 Curtiss St Downers Grove, IL 60515-4056 County: Du Page	13

Facility Is Not Reported In Raats

HAZARDOUS WASTES:

1. WASTE CODE: D000 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification
2. WASTE CODE: D002 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification
3. WASTE CODE: D003 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification
4. WASTE CODE: D006 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification
5. WASTE CODE: D007 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification
6. WASTE CODE: F001 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification
7. WASTE CODE: F002 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification

ERIIS ID EPA ID	FACILITY	ADDRESS	MAP ID

8.	WASTE CODE:	F003	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
9.	WASTE CODE:	F005	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
10.	WASTE CODE:	F006	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
11.	WASTE CODE:	F008	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
12.	WASTE CODE:	F010	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
13.	WASTE CODE:	F017	AMOUNT OF WASTE:	.00000
	SOURCE OF INFO:	Notification		
14.	WASTE CODE:	F001	AMOUNT OF WASTE:	197.31600
	SOURCE OF INFO:	Part A		
15.	WASTE CODE:	F006	AMOUNT OF WASTE:	87.09100
	SOURCE OF INFO:	Part A		

ERIIS Report #123155A Nov 5, 1996

ERIIS ID	FACILITY	ADDRESS	MAP ID
17005009041	Suburban Moving & Storage DISTANCE FROM SITE: .010 Miles DIRECTION FROM SITE: Northeast	2400 Wisconsin Ave Downers Grove, IL 60515-4019 COUNTY: Du Page	2
	IEPA ID: 0430305158 LUST ID: 913065		
17005000938	Arrow Gear Co. DISTANCE FROM SITE: .230 Miles DIRECTION FROM SITE: Northeast	2301 Curtiss St Downers Grove, IL 60515-4055 COUNTY: Du Page	14
	IEPA ID: 0430305016 LUST ID: 930214		
17005006722	Molex Inc. DISTANCE FROM SITE: .272 Miles DIRECTION FROM SITE: Northwest	5224 Katrine Ave Downers Grove, IL 60515-4061 COUNTY: Du Page	15
	IEPA ID: 0430305011 LUST ID: 880876		
17005001098	Baker Motor Express Inc. DISTANCE FROM SITE: .435 Miles DIRECTION FROM SITE: Northwest	5355 Walnut Ave Downers Grove, IL 60515-4108 COUNTY: Du Page	16
	IEPA ID: 0430305152 LUST ID: 912371		
17005003041	Downers Grove Ice Arena Ltd. Partnership DISTANCE FROM SITE: .475 Miles DIRECTION FROM SITE: Southwest	5501 Walnut Ave Downers Grove, IL 60515-4104 COUNTY: Du Page	17
	IEPA ID: 0430305163 LUST ID: 920115		
17005000585	Amoco Oil Co. DISTANCE FROM SITE: .485 Miles DIRECTION FROM SITE: Southeast	2231 Maple Ave Downers Grove, IL 60515-4404 COUNTY: Du Page	18
	IEPA ID: 0430305102 LUST ID: 900986		

ERIIS ID FACILITY ID	FACILITY	ADDRESS	MAP ID
17010012753 2-002802	Suburban Moving & Storage Co DISTANCE FROM SITE: .010 Miles DIRECTION FROM SITE: Northeast	2400 Wisconsin Ave Downers Grove, IL 60515-4019 COUNTY: Du Page	2
	CONTACT: Not Reported	STATUS: Unresolved NUMBER OF TANKS: 0	
17010012722 2-003084	Magnetek Inc DISTANCE FROM SITE: .051 Miles DIRECTION FROM SITE: Northeast	2333 Wisconsin Ave Downers Grove, IL 60515-4022 COUNTY: Du Page	4
	CONTACT: Marron Patrick E 312-969-7660	STATUS: Active NUMBER OF TANKS: 4	
17010012742 2-016273	Scot Inc DISTANCE FROM SITE: .175 Miles DIRECTION FROM SITE: Northwest	2525 Curtiss St Downers Grove, IL 60515-4060 COUNTY: Du Page	11
	CONTACT: Cafaro Al 312-969-0620	STATUS: Closed NUMBER OF TANKS: 0	
17010012658 2-001201	Arrow Gear Co DISTANCE FROM SITE: .230 Miles DIRECTION FROM SITE: Northeast	2301 Curtiss St Downers Grove, IL 60515-4055 COUNTY: Du Page	14
	CONTACT: Greco Dave 312-969-7640	STATUS: Active NUMBER OF TANKS: 2	

ERIIS Report #123155A Nov 5, 1996

ERIIS ID EPA ID	FACILITY	ADDRESS	MAP ID
			4
17039000363 ILD047033188	Suburban Self Storage Facility DISTANCE FROM SITE: .051 Miles DIRECTION FROM SITE: Northeast	2333 Wisconsin Ave Downers Grove, IL 60515-4022 COUNTY: Du Page	

SITE EVENT(S)	COMPLETE DATE
Discovery	08/01/80
Preliminary Assessment	12/01/83
Preliminary Assessment	03/02/93
Hazard Ranking Determined	09/29/85
Screening Site Inspection	12/01/84

ERIIS Report #123155A Nov 5, 1996

ERIIS ID. DATABASE	FACILITY ADDRESS COMMENTS	SELECTED BY
17008005225 RCRIS_SG	Trim Cleaners 1202 T W 75th St Downers Grove, IL 60516 County: Du Page	ZIP code
17008001046 RCRIS_SG	Village Valet Cleaners 7 S 042 Main St Downers Grove, IL 60516 County: Du Page	ZIP code

ERIIS ID EPA ID	FACILITY	ADDRESS
17008001046 ILD020962247	Village Valet Cleaners	7 S 042 Main St Downers Grove, IL 60516 County: Du Page

Facility Is Not Reported In Raats

HAZARDOUS WASTES:

1. WASTE CODE: F002 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification

17008005225 ILD982619405	Trim Cleaners	1202 T W 75th St Downers Grove, IL 60516 County: Du Page

Facility Is Not Reported In Raats

HAZARDOUS WASTES:

1. WASTE CODE: F002 AMOUNT OF WASTE: .00000
SOURCE OF INFO: Notification

ENVIRONMENTAL RISK INFORMATION & IMAGING SERVICES
AERIAL PHOTOGRAPH SEARCH REPORT

The following sources have reported aerial photo coverage for the subject site USGS topoquad.
For site-specific photo availability and ordering, please call the individual source agency or call AIC at 1-800-945-9509 or fax this page to AIC at 512-478-5215.

ERIIS Report #123155A

Nov 5, 1996
Page 1

VENDOR NAME
PHONE

ADDRESS

Agricultural Stabilization And Conservation Service
(801) 975-3503

Aerail Photography Field Office P O Box 30010
Salt Lake City, UT 84130-0010

DATE OF COVERAGE: 1954 OCT 23
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: BWS
SCALE: 20000
FOCAL LENGTH: 8.25in OR 210mm
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS: 01

DATE OF COVERAGE: 1961 SEP 26
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: BWS
SCALE: 20000
FOCAL LENGTH: 8.25in OR 210mm
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS: 02

DATE OF COVERAGE: 1967 OCT 02
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: BWS
SCALE: 20000
FOCAL LENGTH: 8.25in OR 210mm
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS: 02

DATE OF COVERAGE: 1974 OCT 10
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE:
SCALE: 40000
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS: 04

Soil Conservation Service Aerial Photogrpahy Field Office
(801) 975-3503

P O Box 30010
Salt Lake City, UT 84130-0010

DATE OF COVERAGE: 1970
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: BWS
SCALE: 38000
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

U S Geological Survey Reston Esic
(703) 648-5920

507 National Center
Reston, VA 22092

DATE OF COVERAGE: 1952 APR 19
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: UC
SCALE: 17000
FOCAL LENGTH: OTHER
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1962 APR 16
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: VALM
SCALE: 24000
FOCAL LENGTH: OTHER
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1973 APR 23
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: VDCR
SCALE: 29802
FOCAL LENGTH: OTHER
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1946 OCT 20
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: CB
SCALE: 27200
FOCAL LENGTH: OTHER
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1978 NOV 02
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: VEQZ
SCALE: 80000
FOCAL LENGTH: OTHER
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1984 MAY 01
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: N4188
SCALE: 58000
FOCAL LENGTH: OTHER
FILM TYPE: COLOR
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

The following sources have reported aerial photo coverage for the subject site USGS topoquad.
For site-specific photo availability and ordering, please call the individual source agency or call AIC at 1-800-945-9509 or fax this page to AIC at 512-478-5215.

VENDOR NAME
PHONE

ADDRESS

DATE OF COVERAGE: 1984 MAY 01
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: N4188
SCALE: 80000
FOCAL LENGTH: OTHER
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1990 JUL
SENSOR CLASS: Slar
PROJECT CODE: RADAUR
SCALE: 0250000
FOCAL LENGTH: OTHER
FILM TYPE: B&W
CLOUD COVER: UNK
QUADRANGLE COVERAGE: 100%
REMARKS: AURORA W10N

DATE OF COVERAGE: 1988
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: NP8826
SCALE: 0040000
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: COLOR
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS: NAPP-LEAF OFF

National Archives & Records Admin Cartographic & Architectural Br 8601 Adelphi Rd
(301) 713-7040
College Park, MD 20740-6001

DATE OF COVERAGE: 1939
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: BWS
SCALE: 20000
FOCAL LENGTH: 8.25in OR 210mm
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS: ASCS PROJECT

National Aeronautics And Space Administration, Js
(800) USA-MPAS
Johnson Space Center

DATE OF COVERAGE: 1972 JUN 06
SENSOR CLASS: Vertical Reconnaissance
PROJECT CODE: 2050
SCALE: 103726
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: COLOR
CLOUD COVER: 20%
QUADRANGLE COVERAGE: 60%
REMARKS: 620500360 0055 0

DATE OF COVERAGE: 1972 JUN 06
SENSOR CLASS: Vertical Reconnaissance
PROJECT CODE: 2050
SCALE: 104097
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: COLOR
CLOUD COVER: 20%
QUADRANGLE COVERAGE: 60%
REMARKS: 620500350 0055 0

DATE OF COVERAGE: 1972 JUN 06
SENSOR CLASS: Vertical Reconnaissance
PROJECT CODE: 2050
SCALE: 104444
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: COLOR
CLOUD COVER: 10%
QUADRANGLE COVERAGE: 40%
REMARKS: 620500360 0057 0

DATE OF COVERAGE: 1972 JUN 06
SENSOR CLASS: Vertical Reconnaissance
PROJECT CODE: 2050
SCALE: 105229
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: COLOR
CLOUD COVER: 10%
QUADRANGLE COVERAGE: 40%
REMARKS: 620500350 0057 0

DATE OF COVERAGE: 1972 JUN 10
SENSOR CLASS: Vertical Reconnaissance
PROJECT CODE: 2050
SCALE: 103702
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: COLOR
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 50%
REMARKS: 620500410 0122 0

DATE OF COVERAGE: 1972 JUN 10
SENSOR CLASS: Vertical Reconnaissance
PROJECT CODE: 2050
SCALE: 103702
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: COLOR
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 50%
REMARKS: 620500420 0122 0

DATE OF COVERAGE: 1972 JUN 10
SENSOR CLASS: Vertical Reconnaissance
PROJECT CODE: 2050
SCALE: 104495
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: COLOR
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 50%
REMARKS: 620500410 0120 0

DATE OF COVERAGE: 1972 JUN 10
SENSOR CLASS: Vertical Reconnaissance
PROJECT CODE: 2050
SCALE: 104495
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: COLOR
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 50%
REMARKS: 620500420 0120 0

ENVIRONMENTAL RISK INFORMATION & IMAGING SERVICES
AERIAL PHOTOGRAPH SEARCH REPORT

The following sources have reported aerial photo coverage for the subject site USGS topoquad.
For site-specific photo availability and ordering, please call the individual source agency or call AIC at 1-800-945-9509 or fax this page to AIC at 512-478-5215.

VENDOR NAME
PHONE

ADDRESS

DATE OF COVERAGE: 1972 JUN 11
SENSOR CLASS: Vertical Reconnaissance
PROJECT CODE: 2050
SCALE: 120332
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: COLOR
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 50%
REMARKS: 620500440 0067 0

DATE OF COVERAGE: 1972 JUN 11
SENSOR CLASS: Vertical Reconnaissance
PROJECT CODE: 2050
SCALE: 120332
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: COLOR
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 50%
REMARKS: 620500450 0067 0

Sidwell Co
(708) 231-8200

28 West 240 North St
West Chicago, IL 60185

DATE OF COVERAGE: 1976 MAR
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: 00
SCALE: 24000
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1977
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE:
SCALE: 24000
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1978
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE:
SCALE: 12000
FOCAL LENGTH: 12.00in OR
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1980 MAR
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: 00
SCALE: 24000
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1981 MAR
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: 00
SCALE: 12000
FOCAL LENGTH: 12.00in OR
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1981 MAR
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: 00
SCALE: 63360
FOCAL LENGTH: 3.46in OR 88mm
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

DATE OF COVERAGE: 1986 APR 00
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE:
SCALE: 6000
FOCAL LENGTH: 12.00in OR
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS: DU PAGE COUNTY

DATE OF COVERAGE: 1987 APR 00
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE:
SCALE: 24000
FOCAL LENGTH: 6.00in OR 152mm
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS: DU PAGE COUNTY

DATE OF COVERAGE: 1982 APR
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: ENLARG
SCALE: 0001200
FOCAL LENGTH: 12.00in OR
FILM TYPE: B&W
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS: ALL

Geonex North American Operations Inc Chicago Operations
(708) 298-1480

2140 South Wolf Rd
Des Plains, IL 60018

DATE OF COVERAGE: 1956
SENSOR CLASS: Vertical Carto (implies Stereo)
PROJECT CODE: 36056
SCALE: 12000
FOCAL LENGTH: 12.00in OR
FILM TYPE: B&W IR
CLOUD COVER: 0%
QUADRANGLE COVERAGE: 100%
REMARKS:

ENVIRONMENTAL RISK INFORMATION & IMAGING SERVICES
AERIAL PHOTOGRAPH SEARCH REPORT

The following sources have reported aerial photo coverage for the subject site USGS topoquad.
For site-specific photo availability and ordering, please call the individual source agency or call AIC at 1-800-945-9509 or fax this page to AIC at 512-478-5215.

VENDOR NAME
PHONE

ADDRESS

DATE OF COVERAGE:	1958	FILM TYPE:	B&W IR
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	38030	QUADRANGLE COVERAGE:	100%
SCALE:	12000	REMARKS:	
FOCAL LENGTH:	12.00in OR		
DATE OF COVERAGE:	1960	FILM TYPE:	B&W IR
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	60085	QUADRANGLE COVERAGE:	100%
SCALE:	24000	REMARKS:	
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1961	FILM TYPE:	B&W IR
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	261200	QUADRANGLE COVERAGE:	100%
SCALE:	24000	REMARKS:	
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1963	FILM TYPE:	B&W IR
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	63400	QUADRANGLE COVERAGE:	100%
SCALE:	24000	REMARKS:	
FOCAL LENGTH:	12.00in OR		
DATE OF COVERAGE:	1967	FILM TYPE:	B&W IR
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	6844	QUADRANGLE COVERAGE:	100%
SCALE:	63360	REMARKS:	
FOCAL LENGTH:	3.46in OR 88mm		
DATE OF COVERAGE:	1970	FILM TYPE:	B&W IR
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	70100	QUADRANGLE COVERAGE:	100%
SCALE:	24000	REMARKS:	
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1973	FILM TYPE:	B&W IR
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	73084	QUADRANGLE COVERAGE:	100%
SCALE:	63360	REMARKS:	
FOCAL LENGTH:	3.46in OR 88mm		
DATE OF COVERAGE:	1975	FILM TYPE:	B&W IR
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	75100	QUADRANGLE COVERAGE:	100%
SCALE:	24000	REMARKS:	
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1981 MAR	FILM TYPE:	B&W IR
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	81200	QUADRANGLE COVERAGE:	100%
SCALE:	24000	REMARKS:	
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1985	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	85100	QUADRANGLE COVERAGE:	100%
SCALE:	0024000	REMARKS:	
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1990	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	90100	QUADRANGLE COVERAGE:	100%
SCALE:	0024000	REMARKS:	
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1992	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:		QUADRANGLE COVERAGE:	100%
SCALE:	0024000	REMARKS:	DUPAGE COUNTY
FOCAL LENGTH:	6.00in OR 152mm		

Northeastern Illinois Planning Comm Senior Planning Analyst
(312) 454-0400

400 West Madison St
Chicago, IL 60606

ENVIRONMENTAL RISK INFORMATION & IMAGING SERVICES
AERIAL PHOTOGRAPH SEARCH REPORT

The following sources have reported aerial photo coverage for the subject site USGS topoquad. For site-specific photo availability and ordering, please call the individual source agency or call AIC at 1-800-945-9509 or fax this page to AIC at 512-478-5215.

VENDOR NAME
PHONE

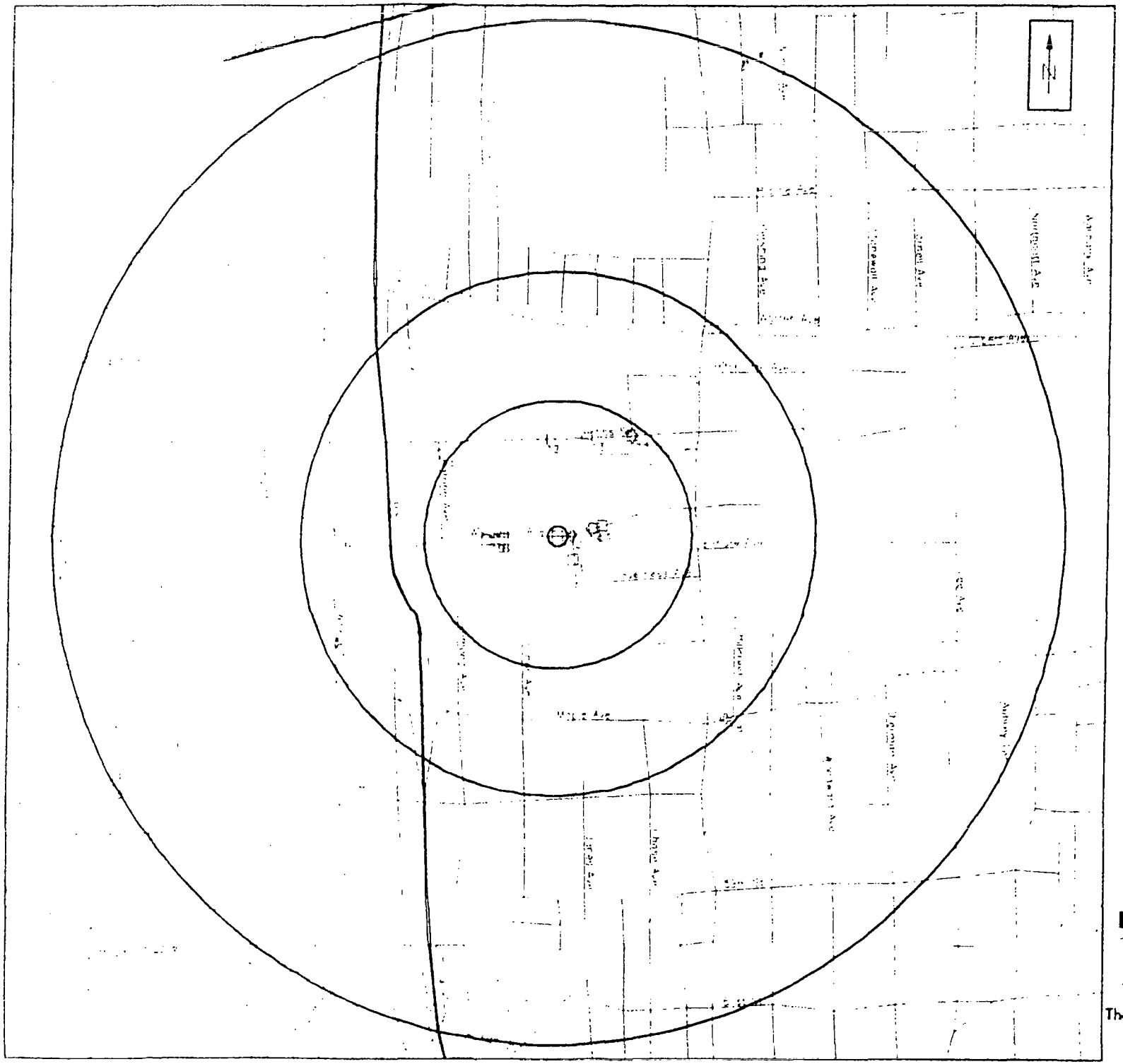
ADDRESS

DATE OF COVERAGE:	1970	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Reconnaissance	CLOUD COVER:	0%
PROJECT CODE:		QUADRANGLE COVERAGE:	100%
SCALE:	0004800	REMARKS:	DU PAGE CO. IL
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1970	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Reconnaissance	CLOUD COVER:	0%
PROJECT CODE:		QUADRANGLE COVERAGE:	100%
SCALE:	0024000	REMARKS:	DU PAGE CO. IL
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1974	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Reconnaissance	CLOUD COVER:	0%
PROJECT CODE:		QUADRANGLE COVERAGE:	100%
SCALE:	0015840	REMARKS:	DU PAGE CO. 73-4
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1975	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Reconnaissance	CLOUD COVER:	0%
PROJECT CODE:		QUADRANGLE COVERAGE:	100%
SCALE:	0004800	REMARKS:	DU PAGE CO. IL
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1980	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Reconnaissance	CLOUD COVER:	UNK
PROJECT CODE:		QUADRANGLE COVERAGE:	100%
SCALE:	24000	REMARKS:	
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1985	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Reconnaissance	CLOUD COVER:	UNK
PROJECT CODE:		QUADRANGLE COVERAGE:	100%
SCALE:	4800	REMARKS:	DU PAGE CTY85/86
FOCAL LENGTH:	UNKOWN		
DATE OF COVERAGE:	1985	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Reconnaissance	CLOUD COVER:	UNK
PROJECT CODE:		QUADRANGLE COVERAGE:	100%
SCALE:	24000	REMARKS:	MCHENRY CTY85/86
FOCAL LENGTH:	UNKOWN		
DATE OF COVERAGE:	1990	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Reconnaissance	CLOUD COVER:	0%
PROJECT CODE:		QUADRANGLE COVERAGE:	100%
SCALE:	0004800	REMARKS:	DU PAGE CO. IL
FOCAL LENGTH:	6.00in OR 152mm		
DATE OF COVERAGE:	1990	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Reconnaissance	CLOUD COVER:	0%
PROJECT CODE:		QUADRANGLE COVERAGE:	100%
SCALE:	0024000	REMARKS:	DU PAGE CO. IL
FOCAL LENGTH:	6.00in OR 152mm		

Markhurd Corp
(612) 420-9606

13400 68th Ave
N Minneapolis/maple Grove, MN 55368

DATE OF COVERAGE:	1988 APR	FILM TYPE:	B&W
SENSOR CLASS:	Vertical Carto (implies Stereo)	CLOUD COVER:	0%
PROJECT CODE:	IL	QUADRANGLE COVERAGE:	100%
SCALE:	40000	REMARKS:	DU PAGE 1/4QD
FOCAL LENGTH:	6.00in OR 152mm		



E R I S
505 Huntmar Park Dr. Suite 200
Herndon, VA 22070
(703)834-0600 (800)989-0402
FAX: (703)834-0606

SITE INFORMATION

Bison Company
2424 Wisconsin Street
Downers Grove, IL
Dupage County
Job Number: 123155A
Map Plotted: Nov 5, 1996

MAP LEGEND

- Property Area
- Radii .25, .5, 1 Mi
- Hydrography
- Railroads
- Roads
- Highways
- NPL 0 Sites
- RCRIS_TS 0 Sites
- CERCLIS 0 Sites
- NFRAP 1 Site
- RCRIS_LG 4 Sites
- RCRIS_SG 7 Sites
- ERNS 0 Sites
- HWS 0 Sites
- LRST 6 Sites
- SWF 0 Sites
- RST 4 Sites

The Information on this map is subject to the ERIIS Disclaimer
Copyright 1996 ERIIS, Inc.

CARLSON ENVIRONMENTAL, Inc.

ATTACHMENT G

Freedom of Information Act (FOIA) Requests

Sent via Facsimile - 217/ 782-9290

November 8, 1996

Ms. Diana Gobelman
FOIA Officer
IEPA Bureau of Land
2200 Churchill Road
Springfield, Illinois 62706

RE: FOIA Request for UST, LUST and RCRA site information.

Dear Ms. Gobelman:

Please send me a copy of the available information contained in the Agency files for the following sites:

Burnside Construction Company
2400 Wisconsin Avenue
Downers Grove, Illinois 60515
T38N R10E Sec 12

Please send the information to:

Melanie Luna
Carlson Environmental, Inc.
312 West Randolph, Suite 300
Chicago, Illinois 60606

Please feel free to call me at 312/346-3812 if you have any questions or require additional information. Thank you for your assistance.

Sincerely,

CARLSON ENVIRONMENTAL, INC.

Melanie L. Luna
Environmental Technician

CARLSON ENVIRONMENTAL, Inc.

December 12, 1996 PN 9442B

Ms. Nancy Wagner
IPSCO
2900 South 21st Avenue
Broadview, Illinois 60153

COPY

SUBJECT: Limited Subsurface Soil Investigation
2424 Wisconsin Avenue
Downers Grove, Illinois

Dear Ms. Wagner:

Enclosed are two copies of the Limited Subsurface Soil Investigation completed by Carlson Environmental, Inc. (CEI) for the above-referenced site. A summary of our findings is located on Page 4 of this report.

If you have questions or would like additional information please contact me or Edward Garske at (312) 346-2140.

It was a pleasure to complete this assignment on your behalf.

Sincerely,

CARLSON ENVIRONMENTAL, INC.

Melanie L. Luna
Environmental Technician

enclosures

CARLSON ENVIRONMENTAL, Inc.

LIMITED SUBSURFACE SOIL INVESTIGATION

2424 Wisconsin Avenue
Downers Grove, Illinois

Prepared by
CARLSON ENVIRONMENTAL, INC.
312 West Randolph Street
Suite 300
Chicago, Illinois 60606
(312) 346-2140

Project No. 9442B
December 12, 1996

Melanie L. Luna
Environmental Technician

Edward E. Garske, CHMM
Vice President of Operations

CARLSON ENVIRONMENTAL, Inc.

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 BACKGROUND 1
2.1 Site Description 1
2.2 Purpose of Investigation 1

3.0 SOIL INVESTIGATION 2
3.1 Sampling Methodology 2
3.2 Laboratory Analytical Results 3

4.0 SUMMARY AND RECOMMENDATIONS 4

ATTACHMENTS

ATTACHMENT A - Figures and Tables
ATTACHMENT B - Soil Boring Logs
ATTACHMENT C - Laboratory Analytical Report

1.0 INTRODUCTION

The objective of this Limited Subsurface Soil Investigation was to address environmental issues identified by Carlson Environmental, Inc. (CEI) in the Phase I Environmental Assessment site inspection, for the property located at 2424 Wisconsin Avenue, Downers Grove, Illinois (Figure One, Attachment A).

According to available information, staining was observed along the south wall of the loading dock area where the facility's air compressor discharge is located, and near two aboveground storage tanks (ASTs). The staining travels west to catch basins which are reportedly cleaned out on a regular basis. In addition, CEI observed staining outside the north wall of the site building along the north wall of the warehouse area. Finally, two gasoline pump islands were observed on the north side of Burnside Construction Company located adjacent to and east of the subject property. No underground storage tanks (USTs) were registered for this site (Figure One, Attachment A).

On December 3rd and 4th, 1996, CEI returned to the site to collect soil samples from under the loading dock's concrete floor surrounding the air-compressor discharge, outside the north wall of the site building in the vicinity of the drum storage area and along the eastern property boundary line closest to the two gasoline pump islands located at Burnside Construction Company. This is a report summarizing CEI's investigation and findings.

2.0 BACKGROUND

2.1 Site Description

The site covers approximately 4.0 acres and contains one building, asphalt-paved parking areas an undeveloped area and a gravel-covered area. The rectangular, one-story slab-on-grade structure has concrete construction. The site was constructed in approximately 1977. Prior to construction of the site building, the property was undeveloped. Currently, the site building is occupied by Bison Gear & Engineering Corporation which utilizes the facility to manufacture gear motors. Operations include stamping, painting, and assembly of cast steel and paper products for forming and shipping gear motors.

2.2 Purpose of Investigation

On December 3rd and 4th, 1996, CEI returned to the site to collect soil samples from beneath the concrete floor surrounding the air-compressor's discharge, outside on the north side of the building where staining was observed and along the eastern property

boundary line closest to the two gasoline pump islands identified at Burnside Construction Company. The purpose of this investigation was to determine if the subsurface soils had been impacted by volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PNAs) or benzene, toluene, ethyl benzene and xylene (BTEX) compounds.

3.0 SOIL INVESTIGATION

3.1 Sampling Methodology

On December 3rd and 4th, 1995, Melanie Luna, and Phil Hoeksema of CEI conducted the sampling activities at the subject site. During the investigation, CEI drilled through the concrete floor at four (4) locations and through a gravel covered area in the parking lot. The exact sampling locations were determined based on field observations and are depicted on Figure Two in Attachment A.

Boreholes LD-1 and LD-2 were emplaced around the air compressor's discharge located in the loading dock area. Boreholes LD-4 and LD-5 were emplaced outside the north wall of the site building in the vicinity of the drum storage area. Borehole LD-3 was emplaced at the easternly property line closest to the two gasoline pump islands located at Burnside Construction Company (Figure Two, Attachment A). Boreholes LD-1, LD-2, LD-4 and LD-5 were advanced to a depth of 5 feet below the ground surface (bgs). Borehole LD-3 was advanced to a depth of fifteen feet bgs.

At each of the four covered area, approximately 6-inches of concrete was encountered. Beneath the concrete were sandy and silty clays. Soil boring logs detailing the materials encountered at each borehole are included in Attachment B. After drilling through the concrete floor and gravel-covered area with a 6-inch diameter diamond tipped core-barrel, a geoprobe was used to continuously sample the soils. All soil samples were examined for visual evidence of contamination and screened with a photoionization detector (PID). The PID is an effective device for identifying areas where VOCs (e.g., oils, solvents, gasoline constituents, etc.) may exist. However, the PID does not identify specific compounds or their concentrations.

All down-hole drilling equipment was cleaned prior to use and between each borehole, and the spoon samplers was cleaned with an Alconox® soap solution between each sample.

Based on the results of field screening (PID measurements, odors and visual observations, etc), 5 soil samples were submitted for laboratory analyses. The samples selected depicted the greatest potential for contamination. Samples: LD-1E (5') and LD-2A (1') were submitted for PNA analysis using EPA Method 8310 and BTEX analysis using EPA Method 8021. Sample: LD-3D (7-9') was submitted for BTEX analysis using EPA Method 8021. Samples: LD-4A (1') and LD-5B (3') were submitted for PNA analysis using EPA Method 8310 and VOC analysis using EPA Method 8260.

Soil samples collected for chemical analyses were placed in laboratory supplied glass jars equipped with teflon-lined lids. The soil samples were immediately labeled and placed into an iced insulated cooler upon collection. Upon completion of the site activities, selected soil samples were shipped to Great Lakes Analytical for chemical analyses based on PID measurements. At all times, the samples were maintained under standard chain-of-custody procedures.

After the soil samples were collected, the concrete cores were placed back into the holes and approximately 1 to 2 inches of "quick drying cement" was used to fill in the remaining void which was subsequently leveled to the surrounding surface.

Field activities were performed following CEI's corporate Health and Safety procedures and guidelines, including the use of proper personal protection equipment.

3.2 Laboratory Analytical Results

All samples were submitted to Great Lakes Analytical of Buffalo Grove, Illinois, for analysis. No PNAs were detected in samples LD-1E and LD-2A above laboratory detection limits. Low levels of PNAs were detected in samples LD-4A and LD-5B, however these concentrations are below the Illinois Environmental Protection Agency's (IEPAs) Tiered Approach to Corrective Action Objectives (TACAO) Tier 1 Industrial/Commercial Route Values for migration to Class I Ground Water or Industrial/Commercial Ingestion pathways (Table One, Attachment A).

No BTEX was detected in samples LD-3D above laboratory detection limits. Low levels of BTEX was detected in samples LD-1E and LD-2A, however these concentrations are below the IEPA's TACAO Tier 1 Industrial/Commercial Route Values for migration to Class I Ground Water pathway (Table Two, Attachment A).

Low levels of VOCs were detected in samples LD-4A and LD-5B, however these concentrations are below the IEPAs TACAO Tier 1 Industrial/Commercial Route Values for migration to Class I Ground Water or pathway (Table Three, Attachment A).

A copy of the complete laboratory report along with the chain of custody is included in Attachment C.

4.0 SUMMARY AND RECOMMENDATIONS

The following is a summary of the Limited Subsurface Soil Investigation conducted by CEI at the property located at 2424 Wisconsin Avenue, Downers Grove, Illinois for the staining issues and gasoline pump islands identified in the Phase I Environmental Assessment report dated November 6, 1996.

The purpose of this investigation was to confirm if the site soils have been impacted by a release of contaminants. A total of five soil borings were emplaced at the subject site. Two soil samples were collected from the loading dock area beneath the concrete floor surrounding the air-compressor's discharge and analyzed for PNAs and BTEX. Two soil samples were collected from outside the north wall of the building near the overhead door and analyzed for PNAs and VOCs. One soil boring was collected from the eastern property boundary line closest to the two gasoline pump islands identified at Burnside Construction Company and analyzed for BTEX.

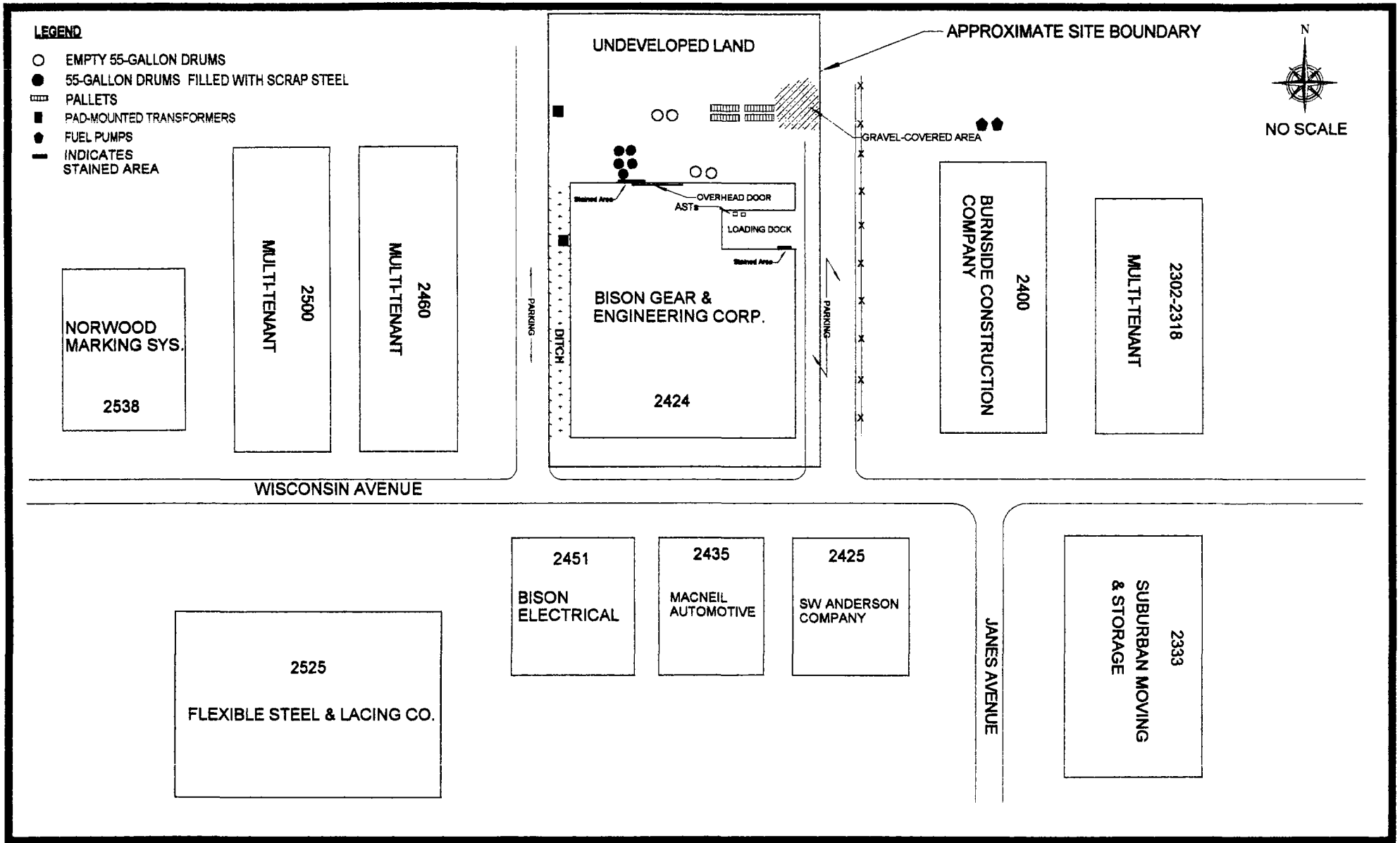
The laboratory reports indicate that low levels of PNAs, BTEX and VOCs were detected in several samples analyzed. However, none of the concentrations exceeded the IEPAs TACAO cleanup objectives.

According to the samples collected and analyzed, there does not appear to be significant contamination in the areas sampled.

CARLSON ENVIRONMENTAL, Inc.

ATTACHMENT A

Figures and Tables



CARLSON ENVIRONMENTAL, INC.
312 WEST RANDOLPH STREET
CHICAGO, ILLINOIS 60606
(312) 346-2140

FIGURE ONE
SITE CONFIGURATION
BISON GEAR & ENGINEERING CORP.
Downers Grove, Illinois

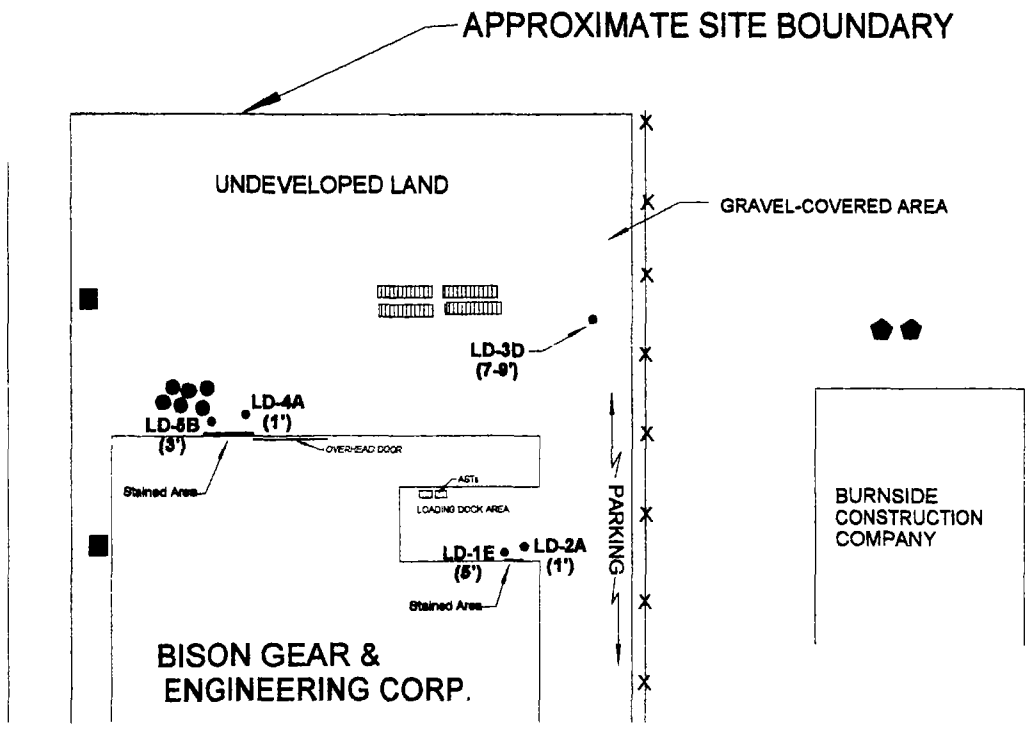
Drawn By: MLL	Project No. 9442A	Scale: No Scale
Checked By:	Date: 11/07/96	Size A

LEGEND

- ● 55-GALLON DRUMS FILLED WITH SCRAP METAL
- PALLETS
- ■ PAD-MOUNTED TRANSFORMERS
- ⬟ FUEL PUMPS
- LD-5B (3') • APPROXIMATE SAMPLING LOCATIONS

N

NO SCALE



CARLSON ENVIRONMENTAL, INC.
312 WEST RANDOLPH STREET
CHICAGO, ILLINOIS 60606
(312) 346-2140

FIGURE TWO
APPROXIMATE BOREHOLE LOCATIONS
BISON GEAR & ENGINEERING CORP.
Downers Grove, Illinois

Drawn By: MLL	Project No. 9442B	Scale: No Scale
Checked By:	Date: 12/04/96	Size A

TABLE ONE:
Soil Sample Analytical Results
PNA (EPA Method 8310 - mg/kg)
2424 Wisconsin Avenue
December 4, 1996

Compound	Tier I Soil Remediation Objectives for Industrial/Commercial Properties *	Sample ID / Depth			
		LD-1E	LD-2A	LD-4A	LD-5B
Benz(a)anthracene	2	ND	ND	0.20	ND
Benzo(a)pyrene	8	ND	ND	1.6	ND
Benzo(b)fluoranthene	5	ND	ND	0.071	0.014
Benzo(g,h,i)perylene	NE	ND	ND	0.052	ND
Benzo(k)fluoranthene	49	ND	ND	0.60	ND
Chrysene	160	ND	ND	0.39	ND
Dibenzo(a,h)anthracene	0.8	ND	ND	0.020	ND

Notes:
* = IEPA Soil Cleanup Objectives established for the protection of Class I ground water or Industrial/Commercial Ingestion pathways
mg/kg = Milligrams per kilogram (parts per million)

ND = not detected
NE = not established

TABLE TWO:
Soil Sample Analytical Results
BTEX (EPA Method 8021 - mg/kg)
2424 Wisconsin Avenue
December 4, 1996

Compound	Tier I Soil Remediation Objectives for Industrial/Commercial Properties *	Sample ID / Depth		
		LD-1E	LD-2A	LD-3D
Benzene	0.30	0.0037	0.002	ND
Toluene	12	0.0081	ND	ND
Ethyl benzene	13	0.010	ND	ND
Xylenes	190	0.034	0.018	ND

Notes:

*= IEPA Soil Cleanup Objectives established for the protection of Class I ground water.
mg/kg = Milligrams per kilogram (parts per million)

ND = not detected

TABLE THREE:
Soil Sample Analytical Results
VOC (EPA Method 8310 - mg/kg)
2424 Wisconsin Avenue
December 4, 1996

Compound	Tier I Soil Remediation Objectives for Industrial/Commercial Properties *	Sample ID / Depth	
		LD-4A	LD-5B
Chloroethane	NE	ND	0.25
cis 1,2-Dichloroethene	0.4	ND	0.0084
Ethyl benzene	13	ND	0.010
Toluene	12	0.038	0.32
Trichloroethylene	0.06	0.007	0.011
Total Xylenes	190	0.019	0.051

Notes:

* = IEPA Soil Cleanup Objectives established for the protection of Class I ground water.
mg/kg = Milligrams per kilogram (parts per million)

ND = not detected
NE = not established

CARLSON ENVIRONMENTAL, Inc.

ATTACHMENT B

Soil Boring Logs

MAJOR DIVISIONS			TYPICAL NAMES	
COARSE-GRAINED SOILS (More than 50% larger than No. 200 sieve size)	GRAVEL AND GRAVELLY SOILS (More than 50% of coarse fraction is larger than No. 4 sieve size)	CLEAN GRAVELS (Little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
			GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
		GRAVELS WITH FINES (With over 12% fines)	GM	Silty gravels, gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	SAND AND SANDY SOILS (More than 50% of coarse fraction is smaller than No. 4 sieve size)	CLEAN SAND (Little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines
			SP	Poorly-graded sands, gravelly sands, little or no fines
		SANDS WITH FINES (With over 12% fines)	SM	Silty-sands, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (More than 50% smaller than No. 200 sieve size)	SILTS AND CLAYS (Liquid limit less than 50%)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts, with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS (Liquid limit greater than 50%)		MH	Inorganic silts, micaceous or diatomaceous fine sand or silty soils
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			PT	Peat, humus, swamp soils with high organic content

UNIFIED SOIL CLASSIFICATION SYSTEM

- Bulk or classification sample
- Sample preserved for possible analysis
- First-encountered ground water level (saturation)
- Static ground water level
- SPT - Standard Penetration Test
- P - Push sample (thin walled sampler "Shelby Tube")

- OVA - Organic Vapor Analyzer, including both the PID and FID
- PID - Photoionization Detector, (Microsp H-200) calibrated to 100 ppm isobutylene standard with a 10.2 eV lamp
- FID - Flameionization Detector (Century 128) calibrated with 95 ppm methane
- Blow Counts - Blows required to drive a standard splitspoon sampler 6 inches with a 140 pound hammer free falling 30 inches. Blow counts for S & H samplers are converted to approximate "equivalent" SPT N valued (n = 0.5 x S & H blows per foot)
- "n" value - Number of blows required to advance the splitspoon sampler in two 6 inch increments falling 6 inches of seating

KEY TO BORING LOG

CARLSON ENVIRONMENTAL, INC.

312 West Randolph Street
Chicago, Illinois 60606
(312) 346-2140

Soil Classification Chart & Key To Test Data

Date	Drawn By	Revised Date	Sheet of
9-8-95	P. Barys		

Carlson Environmental, Inc. 312 West Randolph Street Suite 300 Chicago, IL 60606 Phone (312) 346-2140 Fax (312) 346-8958	Log of Boring LD-1 Bison Gear & Engineering Corp. 2424 Wisconsin Avenue Downers Grove, Illinois	Sheet 1 of 1 Job Number: 9442B Elevation:

Driller: Carlson Environmental, Inc.		**Date/Time Started:** 12/03/96 0905	
Drill Method: Geoprobe		**Date/Time Completed:** 12/03/96 1017	
Sample Method: 1 1/4-Inch Diameter Plastic Sleeve		**Depth to Water:** ft. BGS	**Depth to Rock:** ft. BGS
Borehole Diameter: 1 3/4 in.	**Total Depth:** 5 ft. BGS	**Logged By:** MLL	**Checked By:** PAH

Sample No. (time)	Sample Interval (feet)	PID (units) Recovery (in)	Blow Counts	Depth (feet)	Graphic Log	Materials Description	Remarks
						CONCRETE	
LD-1A (0909)	1	1.5	NA			Light brown **SANDY CLAY (CL-SC)**, soft to medium stiff, moist	
				1			oxidation observed
LD-1B (0918)	2	1.2	NA			Color changed to brown with fine gravel	
				2		Brown, gravelly **SILTY CLAY (CL)**, medium stiff, moist	oxidation observed
LD-1C (0925)	3	0.0	NA				
				3		Brown **CLAYEY SAND**, fine grained sand seam	oxidation observed
LD-1D (0937)	4	0.0	NA			Brown, gravelly **SILTY CLAY (CL)**, medium stiff, moist	
				4			oxidation observed
LD-1E (1019)	5	121.0	NA			stiff	
				5			oxidation observed
						Boring terminated at 5 feet bgs.	
				6			
				7			
				8			
				9			

Carlson Environmental, Inc. 312 West Randolph Street Suite 300 Chicago, IL 60606 Phone (312) 346-2140 Fax (312) 346-6956	Log of Boring LD-2 Bison Gear & Engineering Corp. 2424 Wisconsin Avenue Downers Grove, Illinois	Sheet 1 of 1 Job Number: 9442B Elevation:

Driller: Carlson Environmental, Inc.		**Date/Time Started:** 12/03/96 0940	
Drill Method: Geoprobe		**Date/Time Completed:** 12/03/96 1144	
Sample Method: 1 1/4-Inch Diameter Plastic Sleeve		**Depth to Water:** ft. BGS	**Depth to Rock:** ft. BGS
Borehole Diameter: 1 3/4 in.	**Total Depth:** 5 ft. BGS	**Logged By:** MLL	**Checked By:** PAH

Sample No. (time)	Sample Interval (feet)	PID (units) Recovery (in)	Blow Counts	Depth (feet)	Graphic Log	Materials Description	Remarks
						CONCRETE	
LD-2A (0945)	1	5.7	NA			Light brown **SANDY CLAY (CL-SC)**, soft to medium stiff, moist	
				1		Brown **SILTY CLAY (CL)**, hard, moist to dry, trace coarse sand	oxidation observed
LD-2B (1100)	2	4.7	NA				
				2			oxidation observed
LD-2C (1125)	3	8.1	NA				
				3			oxidation observed
LD-2D (1127)	4	18.7	NA				
				4		color changed to dark brown, dry, fine coarse sand	
LD-2E (1148)	5	7.0	NA				
				5		Boring terminated at 5 feet bgs.	
				6			
				7			
				8			
				9			

Carlson Environmental, Inc. 312 West Randolph Street Suite 300 Chicago, IL 60606 Phone (312) 346-2140 Fax (312) 346-6956	Log of Boring LD-3 Bison Gear & Engineering Corp. 2424 Wisconsin Avenue Downers Grove, Illinois	Sheet 1 of 1 Job Number: 9442B Elevation:

Driller: Rock & Soil Drilling Corp.		**Date/Time Started:** 12/03/96 1355	
Drill Method: Geoprobe		**Date/Time Completed:** 12/03/96 1555	
Sample Method: 1 1/4-Inch Diameter Plastic Sleeve		**Depth to Water:** ft. BGS	**Depth to Rock:** ft. BGS
Borehole Diameter: 1 3/4 in.	**Total Depth:** 15 ft. BGS	**Logged By:** MLL	**Checked By:** PAH

Sample No. (time)	Sample Interval (feet)	PID (units) Recovery (in)	Blow Counts	Depth (feet)	Graphic Log	Materials Description	Remarks
						CONCRETE	
				1		Brown **SILTY CLAY (CL)**, soft to medium stiff with coarse sand	
LD-3A (1414)	1-3	151.0	NA	2			
				3		Brown **SILTY CLAY (CL)**, medium stiff to stiff, medium coarse sand with fine gravel	
LD-3B (1428)	3-5	204.0	NA	4			
				5			
LD-3C (1440)	5-7	31.9	NA	6			
				7		saturated with coarse gravel	
LD-3D (1455)	7-9	187.0	NA	8			
				9			
LD-3E (1530)	9-11	21.8	NA	10			
				11		color changed to gray/brown	
LD-3F (1555)	11-13	38.8	NA	12			
				13			
LD-3G (1805)	13-15	31.8	NA	14			
				15		Boring terminated at 15 feet bgs.	
				16			
				17			
				18			
				19			
				20			

Carlson Environmental, Inc. 312 West Randolph Street Suite 300 Chicago, IL 60606 Phone (312) 346-2140 Fax (312) 346-8958	Log of Boring LD-4 Bison Gear & Engineering Corp. 2424 Wisconsin Avenue Downers Grove, Illinois	Sheet 1 of 1 Job Number: 9442B Elevation:

Driller: Carlson Environmental, Inc.		**Date/Time Started:** 12/04/96 0820	
Drill Method: Geoprobe		**Date/Time Completed:** 12/04/96 0839	
Sample Method: 1 1/4-Inch Diameter Plastic Sleeve		**Depth to Water:** ft. BGS	**Depth to Rock:** ft. BGS
Borehole Diameter: 1 3/4 in.	**Total Depth:** 5 ft. BGS	**Logged By:** MLL	**Checked By:** PAH

Sample No. (time)	Sample Interval (feet)	PID (units) Recovery (in)	Blow Counts	Depth (feet)	Graphic Log	Materials Description	Remarks
LD-4A (0825)	0-1	480.0	NA			**CONCRETE**	
				1		Brown/gray **SILTY CLAY (CL)**, stiff with trace fine sand and gravel	Solvent odor detected
LD-4B (0833)	1-3	84.8	NA	2		color changed to green/gray with trace gravel	
				3			Solvent odor detected
LD-4C (0841)	3-5	113.0	NA	4		color changed to gray, moist	
				5			Solvent odor detected
				6		Boring terminated at 5 feet bgs.	
				7			
				8			
				9			

Carlson Environmental, Inc. 312 West Randolph Street Suite 300 Chicago, IL 60606 Phone (312) 346-2140 Fax (312) 346-6958	Log of Boring LD-5 Bison Gear & Engineering Corp. 2424 Wisconsin Avenue Downers Grove, Illinois	Sheet 1 of 1 Job Number: 9442B Elevation:

Driller: Carlson Environmental, Inc.		**Date/Time Started:** 12/04/96 0850	
Drill Method: Geoprobe		**Date/Time Completed:** 12/04/96 0910	
Sample Method: 1 1/4-Inch Diameter Plastic Sleeve		**Depth to Water:** ft. BGS	**Depth to Rock:** ft. BGS
Borehole Diameter: 1 3/4 in.	**Total Depth:** 5 ft. BGS	**Logged By:** MLL	**Checked By:** PAH

Sample No. (time)	Sample Interval (feet)	PID (units) Recovery (in)	Blow Counts	Depth (feet)	Graphic Log	Materials Description	Remarks
LD-5A (0855)	0-1	582.0	NA			**CONCRETE**	
						Brown/gray **SILTY CLAY (CL)**, stiff with trace fine sand and gravel	
				1			Solvent odor detected
LD-5B (0904)	1-3	688.0	NA			color changed to brown, soft, moist	
				2		color changed to brown/gray, medium stiff with trace coarse sand	
				3			Solvent odor detected
LD-5C (0912)	3-5	351.0	NA	4			
				5			Solvent odor detected
						Boring terminated at 5 feet bgs.	
				6			
				7			
				8			
				9			

CARLSON ENVIRONMENTAL, Inc.

ATTACHMENT C

Laboratory Analytical Reports

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (847) 808-7766 FAX (847) 808-7772

Carlson Environmental, Inc.	Client Project ID:	9442B, Bison Gear & Eng. Corp.	Sampled: Dec 3, 1996
312 W. Randolph Street	Matrix Descript:	Soil	Received: Dec 4, 1996
Chicago, IL 60606	Analysis Method:	EPA 5030/8021	
Attention: Melanie Luna	First Sample #:	612-0589	Analyzed: Dec 6, 1996
			Reported: Dec 10, 1996

BTEX ANALYSIS (EPA 8021)

Sample Number	Sample Description	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
612-0589	LD-1E	0.0037	0.0081	0.010	0.034
612-0590	LD-2A	0.0020	N.D.	N.D.	0.018
612-0591	LD-3D	N.D.	N.D.	N.D.	N.D.
Detection Limits:		0.0020	0.0050	0.0050	0.0150

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

6120589.CAR <1>

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (847) 808-7766 FAX (847) 808-7772

Bison Environmental, Inc.	Client Project ID:	9442B, Bison Gear & Eng. Corp.	Sampled:	Dec 3, 1996
312 W. Randolph Street	Sample Descript:	Soil: LD-1E	Received:	Dec 4, 1996
Chicago, IL 60606	Analysis Method:	EPA 8310	Extracted:	Dec 5, 1996
Attention: Melanie Luna	Lab Number:	612-0589	Analyzed:	Dec 5, 1996
			Reported:	Dec 10, 1996

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Acenaphthene	1.2	N.D.
Acenaphthylene	0.66	N.D.
Anthracene	0.66	N.D.
Benzo (a) anthracene	0.0087	N.D.
Benzo (a) pyrene	0.015	N.D.
Benzo (b) fluoranthene	0.011	N.D.
Benzo (ghi) perylene	0.051	N.D.
Benzo (k) fluoranthene	0.011	N.D.
Chrysene	0.10	N.D.
Dibenzo (a,h) anthracene	0.020	N.D.
Fluoranthene	0.66	N.D.
Fluorene	0.14	N.D.
Indeno (1,2,3-cd) pyrene	0.029	N.D.
Naphthalene	0.66	N.D.
Phenanthrene	0.66	N.D.
Pyrene	0.18	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (847) 808-7766 FAX (847) 808-7772

Carlson Environmental, Inc.	Client Project ID:	9442B, Bison Gear & Eng. Corp.	Sampled:	Dec 3, 1996
312 W. Randolph Street	Sample Descript:	Soil: LD-2A	Received:	Dec 4, 1996
Chicago, IL 60606	Analysis Method:	EPA 8310	Extracted:	Dec 5, 1996
Attention: Melanie Luna	Lab Number:	612-0590	Analyzed:	Dec 5, 1996
			Reported:	Dec 10, 1996

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Acenaphthene	1.2	N.D.
Acenaphthylene	0.66	N.D.
Anthracene	0.66	N.D.
Benzo (a) anthracene	0.0087	N.D.
Benzo (a) pyrene	0.015	N.D.
Benzo (b) fluoranthene	0.011	N.D.
Benzo (ghi) perylene	0.051	N.D.
Benzo (k) fluoranthene	0.011	N.D.
Chrysene	0.10	N.D.
Dibenzo (a,h) anthracene	0.020	N.D.
Fluoranthene	0.66	N.D.
Fluorene	0.14	N.D.
Indeno (1,2,3-cd) pyrene	0.029	N.D.
Naphthalene	0.66	N.D.
Phenanthrene	0.66	N.D.
Pyrene	0.18	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

6120589.CAR <5>

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (847) 808-7766 FAX (847) 808-7772

Bison Environmental, Inc.	Client Project ID:	9442B, Bison Gear & Eng. Corp.	Sampled:	Dec 3, 1996
31[illegible] W. Randolph Street	Sample Descript:	Soil: LD-4A	Received:	Dec 4, 1996
Chicago, IL 60606	Analysis Method:	EPA 8310	Extracted:	Dec 5, 1996
Attention: Melanie Luna	Lab Number:	612-0592	Analyzed:	Dec 5, 1996
			Reported:	Dec 10, 1996

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Acenaphthene	1.2	N.D.
Acenaphthylene	0.66	N.D.
Anthracene	0.66	N.D.
[redacted]	[redacted]	[redacted]
Fluoranthene	0.66	N.D.
Fluorene	0.14	N.D.
Indeno (1,2,3-cd) pyrene	0.029	N.D.
Naphthalene	0.66	N.D.
Phenanthrene	0.66	N.D.
Pyrene	0.18	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Keith W. Keeley
Laboratory Director

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (847) 808-7766 FAX (847) 808-7772

Bison Environmental, Inc.	Client Project ID:	9442B, Bison Gear & Eng. Corp.	Sampled: Dec 3, 1996
312 W. Randolph Street	Sample Descript:	Soil: LD-5B	Received: Dec 4, 1996
Chicago, IL 60606	Analysis Method:	EPA 8310	Extracted: Dec 5, 1996
Attention: Melanie Luna	Lab Number:	612-0593	Analyzed: Dec 5, 1996
			Reported: Dec 10, 1996

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Acenaphthene	1.2	N.D.
Acenaphthylene	0.66	N.D.
Anthracene	0.66	N.D.
Benzo (a) anthracene	0.0087	N.D.
Benzo (a) pyrene	0.015	N.D.
Benzo (b) fluoranthene	0.011	N.D.
Benzo (ghi) perylene	0.051	N.D.
Benzo (k) fluoranthene	0.011	N.D.
Chrysene	0.10	N.D.
Dibenzo (a,h) anthracene	0.020	N.D.
Fluoranthene	0.66	N.D.
Fluorene	0.14	N.D.
Indeno (1,2,3-cd) pyrene	0.029	N.D.
Naphthalene	0.66	N.D.
Phenanthrene	0.66	N.D.
Pyrene	0.18	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kevin V. Keeley
Laboratory Director

6120589.CAR <7>

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (847) 808-7766 FAX (847) 808-7772

Bison Environmental, Inc.	Client Project ID:	9442B, Bison Gear & Eng. Corp.	Sampled: Dec 3, 1996
312 W. Randolph Street	Sample Descript:	Soil: LD-4A	Received: Dec 4, 1996
Chicago, IL 60606	Analysis Method:	EPA 8260	
Attention: Melanie Luna	Lab Number:	612-0592	Analyzed: Dec 9, 1996
			Reported: Dec 10, 1996

VOLATILE ORGANICS by GC/MS (EPA 8260)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	25	N.D.
Benzene	5.0	N.D.
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	5.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	5.0	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chlorodibromomethane	5.0	N.D.
Chloroethane	5.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans 1,3-Dichloropropene	5.0	N.D.
Ethylbenzene	5.0	N.D.
2-Hexanone	10	N.D.
Methylene chloride	5.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	5.0	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
Toluene	5.0	7.0
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	7.0
Trichlorofluoromethane	5.0	N.D.
Vinyl acetate	10	N.D.
Vinyl chloride	5.0	N.D.
Total Xylenes	5.0	13

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kelly W. Keeley
Laboratory Director

6120569 CAR <2>

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (847) 808-7766 FAX (847) 808-7772

Carlson Environmental, Inc.	Client Project ID:	9442B, Bison Gear & Eng. Corp.	Sampled:	Dec 3, 1996
312 W. Randolph Street	Sample Descript:	Soil: LD-5B	Received:	Dec 4, 1996
Chicago, IL 60606	Analysis Method:	EPA 8260		
Attention: Melanie Luna	Lab Number:	612-0593	Analyzed:	Dec 9, 1996
			Reported:	Dec 10, 1996

VOLATILE ORGANICS by GC/MS (EPA 8260)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	25	N.D.
Benzene	5.0	N.D.
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	5.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	5.0	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chlorodibromomethane	5.0	N.D.
Chloroethane	5.0	250
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	5.4
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans 1,3-Dichloropropene	5.0	N.D.
Ethylbenzene	5.0	10
2-Hexanone	10	N.D.
Methylene chloride	5.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	5.0	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
Toluene	5.0	220
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	11
Trichlorofluoromethane	5.0	N.D.
Vinyl acetate	10	N.D.
Vinyl chloride	5.0	N.D.
Total Xylenes	5.0	51

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

CEI

CHAIN OF CUSTODY RECORD

No. 7790

CARLSON ENVIRONMENTAL, INC. 312 W. Randolph St. Chicago, IL 60606 (312) 346-2140

PROJ. NO. 9442B

PROJECT NAME BISON GEAR & ENGINEERING CORP

SAMPLERS. (Signature) Melanie L. Luna (MELANIE L. LUNA)

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	BTEX (8021)	PNAS (8310)	VOCS (8260)						REMARKS
	LD-1E	12/3	1019		✓	Sample collected from 5'	2	✓	✓							6120589
	LD-2A	12/3	0945		✓	Sample collected from 1'	2	✓	✓							6120590
	LD-3D	12/3	1455		✓	Sample collected from 7-9'	1	✓								6120591
	LD-4A	12/4	0025		✓	Sample collected from 1'	2		✓	✓						6120592
	LD-5B	12/4	0904		✓	Sample collected from 3'	2		✓	✓						6120593
6																
7																
8																
9																
10																

Relinquished by (Signature)	Date/Time	Received by (Signature)
Melanie L. Luna	12/4/96 1310	MR Richards
MR Richards	12/4 1600	K. Krill 12/4/96 1600
Relinquished by (Signature)	Date/Time	Received for Laboratory by (Signature)

REMARKS

PLEASE FAX RESULTS TO:
MELANIE LUNA @
(312) 346-6956

* PLEASE FAX NLT 12/10/96 2:00pm

Distribution: White - Accompanies Shipment; Yellow - Laboratory File; Pink - Coordinator Field Files