

2007

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Recommended Citation

Thomas Y. Allman, *Managing Preservation Obligations After The 2006 Federal E-Discovery Amendments*, 13 Rich. J.L. & Tech 9 (2007).
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MANAGING PRESERVATION OBLIGATIONS AFTER THE 2006 FEDERAL E-DISCOVERY AMENDMENTS

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Cite as: Thomas Y. Allman, *Managing Preservation Obligations After the 2006 Federal E-Discovery Amendments*, 13 RICH. J.L. & TECH. 9 (2007), <http://law.richmond.edu/jolt/v13i3/article9.pdf>.

I. INTRODUCTION

[1] The 2006 E-Discovery Amendments to the Federal Rules of Civil Procedure (2006 Amendments or the Amendments)¹ do not directly address the onset or scope of preservation obligations. As noted in the September 2005 Report of the Standing Committee of the Judicial Conference² recommending adoption of the 2006 Amendments,

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¹ The 2006 Amendments with Committee Notes came into effect December 1, 2006. For a complete text of the rules and notes, see http://www.uscourts.gov/rules/EDiscovery_w_Notes.pdf [Hereinafter Amendments]. The amendments impact Rules 16, 26, 33, 34, 37, 45 and Form 35. For a summary of the development of the new rules, see Thomas Y. Allman, *The Impact of the Proposed Federal E-Discovery Rules*, 12 RICH. J. L. & TECH. 13 (2006).

² The Standing Committee is responsible for the rule-drafting activities of its Advisory Committees on Appellate Rules, Bankruptcy Rules, Civil Rules and Evidence Rules. The Civil Rules Advisory Committee completed its six year e-discovery rule drafting effort with its Report of May 27, 2005, as revised July 25, 2005 (“Advisory Committee Report”). A copy of that Report is reproduced as Appendix C to the Report of Judicial Conference Of the United States on Rules of Practice and Procedure (the “Standing Committee Report”), available at <http://www.uscourts.gov/rules/Reports/ST09-2005.pdf>.

preservation obligations “arise from independent sources of law” and are dependent upon “the substantive law of each jurisdiction.”³ However, the Amendments have a major impact on how parties must analyze and execute preservation obligations involving electronically stored information (“ESI”).⁴

[2] This article first discusses the contours of the obligation to preserve and the relevant provisions of the 2006 Amendments. It then discusses the legal and practical aspects of preserving active data as well as information found on less accessible sources, such as backup media, dynamic databases, individual hard drives and legacy sources.

[3] The article concludes with a summary of the elements of a typical litigation hold process, as well as a discussion of the offensive use of protective orders to determine preservation obligations.⁵ A “legal hold”⁶ or “litigation hold”⁷ is the method used to notify personnel in relevant functional and business units about the necessity for preservation in a specific case. It can be a hectic and demanding task.⁸ Its careful

Citations in this article to the pages of the Advisory Committee Report correspond to the pagination adopted and used in the Appendix.

³ *Id.* at Rules pages 32-34.

⁴ While the focus of this article is on ESI, preservation obligations attach to all forms of potentially discoverable evidence, including tangible objects and documents subject to discovery under Rule 34(a) of the Amendments.

⁵ The author expresses gratitude to Craig Ball for his help in articulating some of the more technical aspects of this article and to Deidre Paknad and Bobbi Basile for their helpful comments and suggestions regarding litigation holds. Any shortcomings or errors contained in this article, however, are solely those of the author.

⁶ The Sedona Conference[®] Working Group on Best Practices for Electronic Document Retention & Production utilizes the phrase “legal hold” in its comprehensive description of the process. See THE SEDONA PRINCIPLES: BEST PRACTICES GUIDELINES & COMMENTARY FOR MANAGING INFORMATION & RECORDS IN THE ELECTRONIC AGE, Guideline 5, Comment 5.e. (February 2005), available at http://www.thosedonaconference.org/dltForm?did=TSG9_05.pdf (“Legal holds and procedures should be appropriately tailored to the circumstances.”).

⁷ Courts have increasingly adopted the “litigation hold” terminology to describe this process, as does this article. See, e.g., *Consol. Alum. Corp. v. ALCOA*, No. 03-1055-C-M2, 2006 WL 2583308 (M.D. La. July 19, 2006).

⁸ See Michael E. Lackey, Jr., *Litigation Holds: Practical Considerations, Electronic Discovery and Retention Guidance for Corporate Counsel 2006*, 747 PLI/Lit 279 (2006) (describing the need for prompt action and suggesting that parties should err on the side

implementation is particularly important in light of the paradigm shift towards heightened judicial scrutiny⁹ of preservation decisions made by producing parties.

A. THE DUTY TO PRESERVE

[4] A duty to maintain or safeguard potential evidence (to “preserve the *status quo*” pending discovery) exists when a party learns of the commencement of litigation or when litigation is “foreseeable” with a degree of certainty.¹⁰ Similar obligations are incurred by parties who decide to pursue a claim or institute a proceeding.¹¹ Identifying the moment in time when these obligations are “triggered” or “arise” involves an exercise of informed judgment.¹² Arrival of a preservation demand from opposing counsel,¹³ for example, may be material to determining whether or when an obligation to preserve arises. However, it is not determinative of the actions which must be undertaken in response.¹⁴

of being over inclusive in light of the liberal pleading requirements of the Federal Rules of Civil Procedure).

⁹ *C.f.* Wood v. Sempra Energy Trading Corporation, No. 3:03-CV-986 (JCH), 2005 WL 3465845 at *6 (“Taking the record before this court as a whole, . . . the court cannot find that either that [sic] Sempra failed to do a thorough search for documents responsive to Wood’s request, nor can it find that there are documents that exist which Sempra has purposefully withheld.”).

¹⁰ See Broccoli v. Echostar Commc’ns, 229 F.R.D. 506, 510 (D. Md. 2005) (stating that a duty to preserve was triggered by conversations with a supervisor one year prior to filing of EEOC complaint).

¹¹ See Samsung Elecs. Co. v. Rambus, Inc., 440 F. Supp. 2d 495, 496-98 (E.D. Va. 2006) (holding that destruction of patent files prior to filing of infringement claim constituted spoliation of evidence).

¹² See George Paul, *The Significance of Litigation Holds in E-Discovery*, COMPLIANCE RESOURCES, Nov. 2006, available at http://www.complianceresources.org/counsel/comply_archive/expert/200605.html (determining when obligation is triggered is a matter of judgment based on a sophisticated cost/benefit analysis despite simplistic case law on topic).

¹³ The widespread use of demand letters is a relatively recent phenomenon. Demand letters are sometimes sent to gain tactical advantage. See Frey v. Gainey Transp. Servs., No. 1:05-CV-1493-JOF, 2006 WL 2443787 at *1-2, *25-26 (N.D. Ga. Aug. 22, 2006) (involving nineteen-page demand letter was intended to “sandbag” producing party in the event that all demands were not met).

¹⁴ See Turner v. Resort Condos. Int’l L.L.C., No. 1:03-cv-2025 DFH-WTL, 2006 WL 1990379, *8 (S.D. Ind. July 13, 2006) (denying motion for sanctions where motion was

[5] In general, a party is only under an obligation to make reasonable and good faith efforts to preserve potentially discoverable information and tangible things¹⁵ pending discovery.¹⁶ The duty applies both to information within and outside¹⁷ the United States, which is under the custody and control of the party,¹⁸ including potential evidence which may be in databases created by third party vendors.¹⁹ The scope of the obligation is not determined by the classification assigned to the information for records management purposes.²⁰

[6] A party may need to act affirmatively to prevent the destruction of information. This intervention process is part of what is known as a “litigation hold.”²¹ A widely accepted statement of this principle, arising out of the *Zubulake* litigation,²² is that “[o]nce a party reasonably

based on mistaken belief that producing party was required to comply with overly broad demand letter).

¹⁵ See THE SEDONA PRINCIPLES: BEST PRACTICES RECOMMENDATIONS & PRINCIPLES FOR ADDRESSING ELECTRONIC DOCUMENT PRODUCTION, Principle 5 at *23, (July 2005), available at http://www.thesedonaconference.org/dltForm?did=7_05TSP.pdf (enter requested information and click “download”) (stating that a party must act reasonably and in good faith in executing preservation obligations, but is not expected to take every conceivable step) [hereinafter SEDONA PRINCIPALS].

¹⁶ *Miller v. Holzmann*, CA No. 95-01231 (RCL/JMF), 2007 WL 172327, at *6 (D. D.C. Jan. 17, 2007) (applying Sedona Principle 5 in the context of government reaction to a FOIA request).

¹⁷ See *Reino de Espana v. Am. Bureau of Shipping*, No. 03 Civ. 3573 LTS/RLE, 2006 WL 3208579, at *1 (S.D.N.Y. Nov. 3, 2006) (granting motion to compel production from computers located in government agencies in Spain).

¹⁸ See *MacSteel, Inc. v. Eramet N. Am.*, No. 05-74566, 2006 WL 3334011, at *1 (E.D. Mich. Nov. 16, 2006) (finding no duty to preserve notes made by and in possession of former employee).

¹⁹ *Quinby v. WestLB AG*, No. 04Civ.7406(WHP)(HBP), 2005 WL 3453908, at *8 (S.D.N.Y. Dec. 15, 2005) (involving databases maintained by outside vendor in connection with previous litigation projects).

²⁰ *Wells v. Orange County School Board*, Case No. 6:05-cv-479-Orl-28DAB, 2006 U.S. Dist. LEXIS 81265, at *6-7 (M.D. Fla. Nov. 7, 2006) (ruling that a record retention policy allowing destruction of transitory e-mail was not determinative of preservation obligations).

²¹ See Advisory Committee Report, *supra* note 2, at C-85 (explaining that when a party is under a duty to preserve information because of pending or reasonably anticipated litigation, intervention in the routine operation of an information system is one aspect of what is often called a “litigation hold”).

²² In a series of opinions written in 2003 and 2004, Judge Shira Sheindlin of the Southern District of New York famously dealt with e-mail-related preservation obligations in the

anticipates litigation, it must suspend its routine document retention policy/destruction policy and put in place a litigation hold to ensure preservation” of relevant ESI.²³ The exact responses will vary with the type of litigation and an assessment of what is at stake.²⁴

[7] A number of unique attributes make the execution of preservation obligations particularly difficult when ESI is involved. First, information may be available only for an “evanescent time period”²⁵ and thus difficult to preserve. Dynamic databases, for example, are often crucial to the ongoing operation of an enterprise,²⁶ but implementing a litigation hold in such a context, absent an infrastructure established for that purpose, can be very problematic.²⁷ Second, routine business processes are often designed to free up storage space for other uses without any intent to impede the preservation of potential evidence for use in discovery.²⁸ Interruption of those routine processes is notoriously difficult to implement in a consistent fashion. Moreover, since some types of ESI not ordinarily visible to a

context of a single plaintiff discrimination action against her former employer. See generally *Zubulake v. UBS Warburg L.L.C.*, 229 F.R.D. 422 (S.D.N.Y. 2004) (*Zubulake V*); *Zubulake v. UBS Warburg L.L.C.*, 220 F.R.D. 212 (S.D.N.Y. 2003) (*Zubulake IV*); *Zubulake v. UBS Warburg L.L.C.*, 216 F.R.D. 280 (S.D.N.Y. 2003) (*Zubulake III*); *Zubulake v. UBS Warburg L.L.C.*, 230 F.R.D. 290 (S.D.N.Y. 2003) (*Zubulake II*); *Zubulake v. UBS Warburg L.L.C.*, 217 F.R.D. 309 (S.D.N.Y. 2003) (*Zubulake I*).

²³ See, e.g., *Krumwiede v. Brighton Assoc.*, No. 05 C 3003, 2006 WL 1308629, at *8 (N.D. Ill. May 8, 2006) (citing *Zubulake IV*, 220 F.R.D. at 218).

²⁴ See Gregory G. Wrobel, Andrew W. Gardner & Michael J. Waters, *Counsel Beware: Preventing Spoliation of Electronic Evidence in Antitrust Litigation*, 20 ANTITRUST 79, 80-81 (2006) (contrasting the preservation scope of a typical private antitrust case involving market power and competitive harm under the Sherman Act with the relatively narrow focus of a typical employment discrimination case).

²⁵ *O'Brien v. O'Brien*, 899 So. 2d 1133, 1137 (5th Cir. 2005) (“We do not believe that this evanescent time period [the length of time an image appears on a screen] is sufficient to transform acquisition of the communications from a contemporaneous interception to retrieval from electronic storage.”).

²⁶ See MONICA GREENAN, WORKSHOP ON PRESERVATION OF DATABASES, <http://palimpsest.stanford.edu/byform/mailling-lists/cdl/2003/0099.html> (last visited March 19, 2007).

²⁷ See *Burkybile v. Mitsubishi Motors Corp.*, No. 04 C 4932, 2006 WL 3191541, at *4 (N. D. Ill. Oct. 17, 2006) (outlining difficulties arising from the fact that “the database, like some sort of digital organism, changes over time”).

²⁸ See *Turner v. Resort Condos. Int'l, L.L.C.*, No. 1:03-cv-2025-DFH-WTL, 2006 WL 1990379, at *6 (S.D. Ind. July 13, 2006) (stating that the preservation demands went well beyond legal obligations and failed to accommodate the complex computer network).

user (such as metadata or embedded data)²⁹ may be ultimately necessary in a case, attention must be paid to the risk of corrupting the data, intentionally or not, in the preservation process.³⁰

[8] Perhaps the greatest difficulty with preservation of electronic information arises from the sheer volume and diversity of ESI. This fact is crucial in the context of spoliation allegations, since it cannot be assumed that a failure to preserve ESI is equivalent to intent to spoliolate.³¹

B. SANCTIONS AND PENALTIES

[9] A failure to adequately execute preservation obligations can, in some circumstances, result in sanctions,³² with penalties ranging from monetary sanctions to adverse inference jury instructions and even to dismissal of claims or defenses.³³ A finding of culpability is typically central in determining the sanctions applied.³⁴ When a party intentionally fails to

²⁹ See Craig Ball, *Understanding Metadata: Knowing Metadata's Different Forms and Evidentiary Significance is Now an Essential Skill for Litigators*, 13 L. TECH. PRODUCT NEWS 36, 36 (2006) (distinguishing between application and system metadata on the basis of where it is stored and emphasizing that some metadata is more relevant than others and plays a variety of functions depending upon the case).

³⁰ See *In re Priceline.Com Inc. Sec. Litig.*, 233 F.R.D. 88 (D. Conn. 2005). The court in that opinion addressed the production and preservation requirements of a variety of forms of electronically stored information in a pre-trial order. See *id.* at 90-92.

³¹ See *Convolve v. Compaq Computer Corp.*, 223 F.R.D. 162, 176 (S.D. NY 2004) (ruling that only in cases of intentional failure to preserve is it fair to presume that the evidence would be harmful to the spoliator); see also Martin H. Redish, *Electronic Discovery and the Discovery Matrix*, 51 DUKE L.J. 561, 621 (2001) (“[E]lectronic evidence destruction if done routinely in the ordinary course of business, does not automatically give rise to an inference of knowledge of specific documents’ destruction, much less intent to destroy those documents for litigation-related reasons.”).

³² See *Welsh v. United States*, 844 F.2d 1239, 1246 (6th Cir. 1988) (noting that destruction of potentially relevant evidence can occur along a “continuum of fault” ranging from innocence through the degrees of negligence to intentionality with corresponding variance in penalties).

³³ *Stevenson v. Union Pac. R.R. Co.*, 354 F.3d 739, 746 (8th Cir. 2004) (holding that “some indication of an intent to destroy the evidence for the purpose of obstructing or suppressing the truth” is required to issue an adverse inference sanction where information is destroyed through the routine operation of a document retention policy).

³⁴ THE SEDONA PRINCIPLES, *supra* note 15, Principle 14, (“Sanctions, including spoliation findings, should only be considered by the court if, upon a showing of a clear duty to preserve, the court finds that there was an intentional or reckless failure to preserve and

meet its obligations, the courts have not hesitated to identify such conduct as bad faith and apply severe spoliation sanctions.³⁵ However, even absent proof of a deliberate intent to interfere with the litigation process, courts have sanctioned parties for lack of diligence in executing preservation obligations.³⁶ Because of the complexities involved and the room for error, the sanction process can be abused.³⁷

[10] Courts assessing the need to issue sanctions for a failure to preserve often cite the inherent powers of a court to act, not just the authority granted by the Federal Rules.³⁸

[11] Preservation lapses can also constitute a violation of state³⁹ or federal⁴⁰ criminal laws dealing with obstruction of justice where governmental investigations are involved.⁴¹

produce relevant electronic data and that there is a reasonable probability that the loss of the evidence has materially prejudiced the adverse party.”).

³⁵ See *In re Telxon Corp. v. Pricewaterhousecoopers, LLP*, No. 5:98CV2876, 2004 WL 3192729 (N.D. Ohio July 16, 2004). See also *Coleman (Parent) Holdings, Inc. v. Morgan Stanley*, No. CA 03-5045 AI, 2005 WL 674885 at *9-10 (Fla. Cir. Ct. Mar. 23, 2005).

³⁶ See *Phoenix Four, Inc. v. Strategic Res. Corp.*, No. 05 Civ. 04837 (HB), 2006 WL 1409413 (S.D. N.Y. May 23, 2006) (sanctioning party and counsel for failure to adequately search former servers used by defendant).

³⁷ Sheila Mackay & Karla Wehbe, *Upcoming Changes to the Federal Rules and the Impact on the Litigation Technology Profession*, 747 PRACT. L. INST. 339, 358 (2006) (“There are already examples of parties using electronic discovery to either force settlements or avoid the case issues by making the opposing counsel jump through electronic discovery hoops.”).

³⁸ See *In re Quintus Corp.*, 353 B.R. 77, 92, (D. Del. 2006) (stating that the inherent power to oversee litigation provides authority to sanction for failure to produce information destroyed after a party should have reasonably anticipated litigation).

³⁹ See, e.g., N.Y. Penal Law § 690.40 (Consol. 2006).

⁴⁰ 18 U.S.C.A. §1519 (West Supp. 2005). A prominent securities analyst, for example, was indicted and tried on several occasions for his actions in endorsing an e-mail to colleagues that they should “catch up on file cleanup” before leaving for the holidays. The allegation was that he was then aware of the existence of grand jury and subpoenas calling for the production of e-mail. *United States v. Quattrone*, 441 F.3d 153, 166 (2nd Cir. 2006).

⁴¹ See Diane E. Hill, *Anticipatory Obstruction of Justice: Pre-emptive Document Destruction Under the Sarbanes-Oxley Anti-Shredding Statute*, 18 U.S.C. § 1519, 89 CORNELL L. REV. 1519, 1566 (2004) (discussing whether destruction of information pursuant to a records retention policy can be a criminal act).

II. THE 2006 AMENDMENTS

[12] The Standing Committee and its rule-drafting Advisory Committee on Civil Rules were urged by many, including the author,⁴² to deal directly with the ambiguities of preservation obligations in the ESI context. The Advisory Committee actually gave consideration to amending Rule 26 or adding a new Rule 34.1 (“Duty to Preserve”) to provide that parties need not suspend the “operation in good faith” of “disaster recovery or other [computer] systems” provided that one day’s full backup was retained. The proposal also stated that information stored in an inaccessible form did not have to be preserved unless a court ordered the party to do so.⁴³

[13] Ultimately, the Committee concluded that because of Rules Enabling Act concerns, it would be better to focus on process improvements while providing targeted guidance for courts facing motions for sanctions involving a limited class of losses due to preservation failures.⁴⁴

A. EARLY DISCUSSIONS

[14] A key component of the 2006 Amendments is the requirement that “preservation issues” and other ESI “disclosure and discovery” issues be discussed at the Rule 26(f) “meet and confer” conference held before the Rule 16(b) Scheduling Conference.⁴⁵ Under this widely supported change,⁴⁶ parties must prepare a “discovery plan” after the Rule 26(f)

⁴² See Thomas Y. Allman, *The Need for Federal Standards for Electronic Discovery*, 68 DEF. COUNS. J. 206, 209 (2001).

⁴³ See Committee on Rules of Practice and Procedure, Conference on Electronic Discovery, Feb. 20-21, 2004, http://www.uscourts.gov/rules/E-Discovery_Conf_Agenda_Materials.pdf (navigate to Proposed Rule 34.1).

⁴⁴ See Thomas Y. Allman, *Defining Culpability: The Search for a Limited Safe Harbor in Electronic Discovery*, 2006 FED. CTS. L. REV. 7 (2006).

⁴⁵ Rule 26(f) provides that the parties must meet and confer “as soon as practicable” but not less than 21 days before the scheduling conference to discuss preservation and other issues involved in disclosure and discovery of ESI, such as form or forms of production, search terms, the process for claiming privilege or work-product protection and the like. FED. R. CIV. P. 26(f).

⁴⁶ Mandatory discussion of preservation issues was enthusiastically endorsed as a panacea by many who testified at the Public Hearings in early 2005. The Testimony and filed Comments of almost 200 witnesses are indexed at, and accessible from, the U.S. Courts Administrative Office website (“Comments”). See

conference dealing with those elements on which agreement is reached. The court will thereafter issue a Scheduling Order reflecting the plans for the course of the litigation.⁴⁷

[15] The obligation to be open and candid in discussions is reinforced by the initial disclosure requirement under Rule 26(a)(1), the requirements of which apply to both parties and are independent of disclosure obligations associated with requests for production under Rule 34.⁴⁸

[16] Rule 26(f) singles out for discussion possible agreement on the anticipated form or forms of production.⁴⁹ An early agreement on specific file formats for production can significantly reduce later disputes, given that the choice of format leads inevitably to discussions of the relevance and necessity, if any, for preservation and production of metadata and embedded data. For example, in *In re: Celexa and Lexapro Products*

<http://www.uscourts.gov/rules/e-discovery.html>. The Comments represent a valuable snapshot of e-discovery concerns and practices as of 2005 and contain many insightful observations.

⁴⁷ FED. R. CIV. P. 26(f).

⁴⁸ Under Rule 26(a)(1)(B), a party must provide a description, by category or location, of any ESI that the disclosing party may use to support its “claims or defenses.” This “initial” disclosure is to be made separately from and is not limited by the identification requirements of Rule 26(b)(2)(b) which are triggered by service of a request for discovery under Rule 34. Some commentators appear to confuse the two processes. See Rick Wolf, *A Brave New World of E-Discovery Rule (Part II), Compliance Week Guide to E-Discovery*, January 2007, available at <http://lexakos.com/Upload/Brave%20New%20World%20II.pdf>, (“Under [the rules], at the outset of every case parties must exchange a copy (or description by category and location) of all relevant ESI, as well as a description of “inaccessible” ESI a party will not search or produce.”). The Advisory Committee did not intend to expand the initial disclosure requirement as suggested. See Advisory Committee Report, *supra* note 2, at C-23 (“The [initial disclosure] obligation does not force a premature search, but only requires disclosure, either initially or by way of supplementation, of information that the disclosing party has decided it may use to support its case.”).

⁴⁹ This discussion should include the steps that will be taken in regard to preservation of the integrity of any metadata, embedded data or related information pending discovery. A failure to, for example, employ appropriate methods to make forensically sound copies can be a problem. See Craig Ball, *What to Do When a Copy is Not a Copy*, LEGAL TECH. (Oct. 5, 2006), available at <http://www.law.com/jsp/legaltechnology/PubArticleFriendlyLT.jsp?id=1161680719761>.

Liability Litigation,⁵⁰ an agreement was reached to produce ESI in formats that were searchable and manageable (including native file format or as single page TIFF images with ASCII Text) together, to the extent applicable, as metadata fields, author, recipient, date and subject line.

[17] The parties should also discuss techniques to reduce volumes for review,⁵¹ including the possible use of confidentiality agreements governing waiver of privilege or work product protection.⁵²

[18] Finally, requesting parties should be prepared to discuss, to the extent feasible, the discovery requests they intend to make in the case. Both parties⁵³ should discuss preservation steps already undertaken and any plans for intervention in business processes. The Committee Notes to Rules 26(f) and Rule 37(f) admonish parties to pay “particular attention” in their discussions “to [maintaining] the balance between the competing needs to preserve relevant evidence and to continue routine operations critical to ongoing activities.”⁵⁴

⁵⁰ *In re: Celexa and Lexapro Prod. Liab. Litig.*, No. MDL 1736, 2006 WL 3497757 (E.D. Mo. Nov. 13, 2006).

⁵¹ A partial listing of possible topics includes: (1) the claims and defenses to be asserted and the potential for additional parties; (2) any potential sources of “active” data; (3) steps undertaken or contemplated pursuant to a “litigation hold” process; (4) intentions to seek information beyond that available on active systems; (5) potential cost-shifting; (6) identification, at least informally, of any potential sources either party may deem to be “not reasonably accessible” under Rule 26(b)(2)(B); and (7) methods to reduce volumes to be reviewed, such as search terms, scope and methods of de-duplication, etc.

⁵² Including “quick peek” or “clawback” agreements, whereby parties to the agreement agree that the inadvertent production does not, as to themselves, waive the right to assert a privilege. The 2006 Amendments also include a provision, not discussed herein, which provides a similar optional procedure for claiming privilege after production. *See* FED. R. CIV. P. 26(b)(5)(B).

⁵³ Even in “asymmetric” discovery cases, plaintiffs have preservation obligations. For example, in *Leon v. IDX Sys.*, 464 F.3d 951, 955-57, 961 (9th Cir. Sept. 2006), the Ninth Circuit affirmed the dismissal of an action brought by a terminated employee who had deliberately deleted personal files from a company furnished laptop in such a manner that it was impossible to recover their use for defensive purposes.

⁵⁴ *See* Advisory Committee Report, *supra* note 2, at C-34 to C-35 (“The parties should take account of these considerations in their discussions, with the goal of agreeing on reasonable preservation steps.”).

[19] Early experience with this “best practice” approach confirms its value in encouraging voluntary resolution of key issues. However, the Advisory Committee intended that courts should become actively involved when parties are unable to reach an agreement, and either party may seek such intervention.⁵⁵

B. RESPONSIBILITIES OF COUNSEL

[20] The Amendments elevate the need for early preparation by counsel⁵⁶ on technical and practical issues to a new level. Parties and their counsel must be able to competently conduct meaningful discussions about ESI at the Rule 26(f) conference.⁵⁷ Failure to cooperate risks a waiver of the ability to later claim prejudice or seek sanctions for missed opportunities.⁵⁸

[21] The Committee Note to Rule 26(f) suggests that counsel should become “familiar” with a client’s information systems to the degree necessary to permit discussion of the potential issues involved.⁵⁹ Local

⁵⁵ The Advisory Committee added language to Rule 26(b)(2)(B) after the Public Hearings to clarify that “the responding party may wish to determine its search and potential preservation obligations by moving for a protective order.” Advisory Committee Report, *supra* note 2, at C-50.

⁵⁶ Both inside and retained counsel have a role to play. A full-time lawyer employed by an entity owes primary loyalties to its employer/client. Retained counsel, on the other hand, is responsible to the court in which the case is pending while simultaneously owing an independent duty of loyalty to the client. While communications involving preservation among them are generally subject to the attorney-client privilege when counsel are based in the United States, there may be differences in regard to in-house counsel overseas. *See Louis Vuitton Malletier v. Dooney & Bourke, Inc.*, No. 04 Civ. 5316 (RMB)(MHD), 2006 U.S. Dist. LEXIS 87096, at *55-58 (S.D.N.Y. Nov. 30, 2006) (discussing impact of French law on communications between counsel in the United States and counsel located in France).

⁵⁷ Counsel for requesting parties should prepare themselves for discussions by acquiring sufficient technical fluency to clearly articulate the scope and purpose of requests for ESI, including the desired form or forms of production, including any particularized need for metadata and embedded data.

⁵⁸ *See Treppel v. Biovail Corp.*, 233 F.R.D. 363, 374 (S.D.N.Y. 2006) (endorsing use of search terms selected by defendant notwithstanding failure of plaintiff to participate in discussion).

⁵⁹ A failure to acquire sufficient knowledge to engage in such discussions arguably violates the ethical obligation to provide competent representation. *See ABA MODEL RULES OF PROF'L CONDUCT R. 1.1* (2002) (“[L]egal knowledge, skill, thoroughness and

District Rules⁶⁰ and electronic discovery “guidelines”⁶¹ reinforce this expectation and in some cases mandate a degree of preparation beyond that implied by the Committee Note.⁶² A parallel responsibility arises from the ethical obligation of competence owed by counsel to a client.⁶³ Counsel must be prepared to accurately present information about ESI to the court.⁶⁴

[22] Some decisions imply that counsel owes an independent duty to a court to actively supervise⁶⁵ a party’s compliance with preservation obligations.⁶⁶ In *Phoenix Four, Inc. v. Strategic Resources Corporation*,⁶⁷

preparation reasonably necessary for the representation.”). *C.f.* *Thompson v. Jiffy Lube Int’l*, No. 05-1203-WEB, 2006 WL 3388502, at *2, n2 (D. Kan. Nov. 21, 2006) (ruling that failure to take action regarding an order relating to an e-mail system “raises serious questions about counsel’s experience, knowledge of applicable law, and resources available [to represent class.]”).

⁶⁰ *See, e.g.*, E.D. & W.D. ARK. LOC. R. 26.1; D. DEL.R. 16(4)(B); D.N.J. LOC. CIV. R. 26.1; D. WYO. LOC. R. 26.1.

⁶¹ *See* “Guidelines for Discovery of Electronically Stored Information,” District of Kansas, ¶1, (Oct. 2006), *available at* <http://www.ksd.uscourts.gov/guidelines/electronicdiscoveryguidelines.pdf>.

⁶² *Id.* at ¶ 2 (requiring disclosure of “individuals with knowledge of their client’s electronic systems” prior to the Conference). *See Johnson v. Kraft Foods N. Am., Inc.*, 238 F.R.D. 648, 655-656 (D. Kan. 2006) (summarizing the duties of counsel arising under the District of Kansas Guidelines).

⁶³ *See* Steven C. Bennett, *The Ethics of Electronic Discovery*, Vol. 17 No. 2 PRAC. LITIGATOR 45, 48 (Mar. 2006) (emphasizing the obligation to provide “competent” representation).

⁶⁴ *Compare* *Coleman (Parent) Holdings, Inc. v. Morgan Stanley*, No. CA 03-5045 AI, 2005 WL 674885 at *9-10 (Fla. Cir. Ct. Mar. 23, 2005) (revoking a *pro hac vice* admission in response to inadequate and inaccurate statements about e-discovery) *with* *Clare v. Coleman (Parent) Holdings, Inc.*, 928 So. 2d 1246, 1249 (C.A. 4th Dist., May 24, 2006) (finding violation of due process rights in manner of revocation especially in light of absence of misconduct of counsel in its role as “the messenger”).

⁶⁵ The ABA Discovery Standards distinguish between the preservation obligations of a party and the responsibilities of its counsel. *See* ABA CIV. DISCOVERY STANDARDS (1999), as amended (Aug. 2004), *available at* <http://www.abanet.org/litigation/discoverystandards/2004civildiscoverystandards.pdf> (limiting, in Standard 10, counsel responsibilities to those involving advice regarding preservation and consequences of failures).

⁶⁶ *See* *Zubulake v. UBS Warburg*, 229 F.R.D. 422, 435 (S.D.N.Y. 2004) (“Zubulake V”) (“[C]ounsel [both employed counsel and outside counsel] [are] responsible for coordinating her client’s discovery efforts. In this case, counsel failed to properly oversee UBS in a number of important ways, both in terms of its duty to locate relevant

a court sanctioned a party and its law firm for failure to conduct a “methodical survey of [Defendants] sources of information” in the manner said to be required by the 2006 Amendments.⁶⁸

[23] Conversations about preservation obligations are not necessarily privileged when criminal grand jury investigations involving potential criminal obstruction of justice are involved.⁶⁹ Counsel cannot knowingly aid in any attempt to avoid preservation obligations⁷⁰ by the client, which has the ultimate responsibility to preserve information for discovery.⁷¹

C. THE ACCESSIBILITY DILEMMA

[24] Discovery of ESI is governed by the two-tiered production obligation under Rule 26(b)(2)(B) of the 2006 Amendments.⁷² Although requested

information and its duty to preserve and timely produce that information.”) (*citing* Metropolitan Opera Assoc., v. Local 100, 212 F.R.D. 178, 222 (S.D.N.Y. 2003)). *See also* Gregory G. Wrobel, Andrew M. Gardner & Michael J. Waters, *Counsel Beware: Preventing Spoliation of Electronic Evidence in Antitrust Litigation*, 20 ANTITRUST 79, 80 (2006) (“[Other cases] do not address in the same depth the separate duty – if any – of counsel to locate and preserve relevant electronic information.”).

⁶⁷ Phoenix Four, Inc. v. Strategic Res. Corp., No. 05 Civ. 4837(HB), 2006 WL 1409413 (S.D.N.Y. May 23, 2006).

⁶⁸ *Id.* at *6. (“The duty in such cases is . . . to ascertain whether any information is stored there.”). The District Judge held that the Amendments had “essentially” codified the teaching of *Zubulake IV & V* of which outside counsel should have been well aware. *Id.* In a subsequent opinion issued after dismissal of the case on the merits, the Court ordered payment of attorneys’ fees associated with making the motion as a sanction. *See* Phoenix Four, Inc. v. Strategic Res. Corp., No. 05 Civ. 4837(HB), 2006 WL 2135798, at *3 (S.D.N.Y. Aug. 1, 2006) (approving monetary sanction).

⁶⁹ *See In Re Grand Jury Investigation*, 445 F.3d 266, 269 (3rd Cir. 2006) (holding contents of discussions are not privileged when the client may be committing crime of obstruction of justice by participating in a scheme to delete e-mails after receiving information from counsel about scope of pending subpoena).

⁷⁰ *See* MODEL RULES OF PROF’L CONDUCT R. 3.4(a) (“A lawyer shall not: unlawfully obstruct another party’s access to evidence or unlawfully alter, destroy or conceal a document or other material having potential evidentiary value.”).

⁷¹ *See* *Zubulake V*, 229 F.R.D. at 436 (“At the end of the day, however, the duty to preserve and produce documents rests on the party [which after instructions from counsel] is on notice of its obligations and acts at its own peril.”).

⁷² As discussed below, information located on sources which are not reasonably accessible due to undue burden or costs are subject to production limitations. *See* FED. R. CIV. PRO. 26(b)(2)(B).

to do so,⁷³ the Advisory Committee did not adopt mandatory cost-shifting as a means to deter unnecessary requests for production from inaccessible sources. Instead, the Advisory Committee adopted Rule 26(b)(2)(B)⁷⁴ to provide a presumptive – but refutable – limitation on initial production from those sources which a producing party affirmatively identifies as “not reasonably accessible because of undue burden or cost.”⁷⁵ The Rule places the burden of defending the classification on the producing party⁷⁶ and allows for production from an inaccessible source for “good cause.”⁷⁷ The Committee Note to Rule 26(b)(2)(B) states that “[i]n many circumstances the requesting party should obtain and evaluate the information from such sources before insisting that the responding party search and produce information contained on sources that are not reasonably accessible.” The Committee Note also emphasizes that the

⁷³ For example, at a public hearing of the Advisory Committee, Greg Lederer of the IADC argued in favor of mandatory cost-shifting for discovery of ESI. See Greg Lederer, President-Elect of the IADC, *Testimony at Public Hearing on Proposed Amendments to the Federal Rules of Civil Procedure* 102-107 (Jan. 28, 2005), available at <http://www.uscourts.gov/rules/e-discovery/DallasHearing12805.pdf>.

⁷⁴ Rule 26(b)(2)(B) provides, in its entirety:

A party need not provide discovery of electronically stored information from sources that the party identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the party from whom discovery is sought must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.” FED. R. CIV. P. 26(b)(2)(B).

⁷⁵ Examples of sources which are not reasonably accessible “from current technology” cited by the Advisory Committee include backup tapes intended for disaster recovery purposes, legacy data from obsolete systems, deleted data which remains in fragmentary form and databases that cannot readily create different forms of information than those for which they were designed.

⁷⁶ See *Ameriwood Industries, Inc. v. Paul Liberman*, No. 4:06 CV524-DJS, 2006 U.S. Dist. LEXIS 93380 (E.D. Mo. Dec. 27, 2006) (showing that the burden of demonstrating that the information is not reasonably accessible is satisfied by proof of the efforts involved in copying a hard drive, recovering deleted information and translating recovered data in searchable and reviewable format).

⁷⁷ *Id.* at *15 (“good cause” to obtain mirror images demonstrated because of allegations that the computer hard drives were used to secrete and distribute plaintiff’s confidential information).

proportionality principle in renumbered Rule 26(b)(2)(C)⁷⁸ is available to limit production where necessary.⁷⁹

[25] The presumptive limitation on production creates a major dilemma for a party seeking to decide if affirmative actions regarding a particular inaccessible source are needed. Not until after a court rules on the need to search and produce from the source, can or will, a party know if its initial preservation decisions were correct.

[26] Accordingly, absent agreement with opposing counsel, unilateral preservation decisions about inaccessible sources always carry some risk of post-production challenge for potential spoliation. However, just as the duty to produce is tempered by the principle of proportionality, so should courts take the same approach in regard to preservation decisions.⁸⁰

D. PRODUCTION FORMATS

[27] Rule 34 provides for discovery and production of all types of electronically stored information – whether visible content, embedded data or metadata⁸¹ – but the Rule does *not* regulate the extent, if any, that

⁷⁸ See 8 CHARLES ALAN WRIGHT, ARTHUR R. MILLER, & RICHARD L. MARCUS, FEDERAL PRACTICE AND PROCEDURE § 2008.1 (2d ed. 1994 & Supp. 2006) (noting that the “concept of proportionality” was added in 1983 to promote judicial limitation on a case-by-case basis to avoid abuse by reducing burden and “overuse, whether intentional or thoughtless, of broad discovery.”). The 2006 Amendments renumbered Rule 26(b)(2)(iii) as Rule 26(b)(2)(C) and emphasized that production from all sources of ESI are subject to its terms. See Amendments, *supra* note 1, at 7-8.

⁷⁹ FED. R. CIV. P. 26(b)(2)(B) (COMM. NOTE) (“The [proportionality] limitations of Rule 26(b)(2)(C) continue to apply to all discovery of electronically stored information, including that stored on reasonably accessible electronic sources.”).

⁸⁰ The ultimate protection for a party whose “guess” turns out to be wrong is that the decisions were reasonable, made in good faith, and not intended to obstruct or prevent the discovery of relevant information. See Thomas Y. Allman, *Defining Culpability: The Search for a Limited Safe Harbor in Electronic Discovery*, 2006 FED. CTS. L. REV. 7 (2006).

⁸¹ For purposes of this article, I adopt the distinction between metadata and embedded data used by the Advisory Committee. See FED. R. CIV. P. 26(f) (COMM. NOTE):

For example, production may be sought of information automatically included in electronic files but not apparent to the creator or to readers. Computer programs may retain draft language, editorial comments, and other deleted matter (sometimes referred to as “embedded data” or

metadata and embedded data must be produced in any particular case.⁸² The focus in Rule 34 is on the form or forms of production of the ESI sought in discovery.⁸³ While this necessarily implicates issues about metadata and embedded data, it is not synonymous with it.

[28] Electronically stored information is created and stored in a “native” file format which uniquely reflects the software application operating in conjunction with the computers file system. This “native” format contains information apparent to the user, but also may carry embedded data and metadata accessible only to the application that created it. While some information (e.g., file name, size and date information) is routinely furnished in discovery, other metadata and embedded data is rarely relevant and presents significant functional and practical drawbacks when produced as part of a native file format.⁸⁴ The production of metadata and embedded data raises ethical and practical issues which may complicate privilege review.⁸⁵

“embedded edits”) in an electronic file but not make them apparent to the reader. Information describing the history, tracking, or management of an electronic file (sometimes called ‘metadata’) is usually not apparent to the reader viewing a hard copy or a screen image.

⁸² See *Williams v. Sprint/United Mgmt. Co.*, 230 F.R.D. 640, 649 (D. Kan. Sept. 29, 2005) (“Although Rule 34(b) uses the phrase ‘in a form or forms in which it is ordinarily maintained,’ [the Rule and Comments] provide no further guidance as to whether a party’s production . . . would encompass the electronic document’s metadata.”).

⁸³ See FED. R. CIV. P. 34(b)(ii):

[Unless the parties otherwise agree, or the court otherwise orders:] . . . if a request does not specify the form or forms for producing electronically stored information, a responding party must produce the information in a form or forms in which it is ordinarily maintained or in a form or forms that are reasonably usable.

⁸⁴ Individual pages from documents produced in native file formats are difficult or impossible to redact or Bates number and are more difficult to use in depositions or at trial than imaged formats. A privilege review can also be more difficult to accomplish in a timely and cost effective manner.

⁸⁵ See ABA Formal Opinion 06-442 (Review and Use of Metadata) (advocating scrubbing of metadata to avoid disclosures). *But compare* the Maryland and New York ethics opinions summarized in, John F. Baughman and H. Christopher Boehning, *Metadata Ethics Electronic Discovery*, 236 N.Y. L.J. 5, Col. 1 (Dec. 26, 2006).

[29] Rule 34(b) outlines a procedure for reaching agreement on the form or forms of production of ESI. As a matter of best practice, and pursuant to the intent of Rule 26(f), the issues should be discussed promptly at the initial early meet and confer. In *Kentucky Speedway, LLC v. National Association of Stock Car Auto Racing, Inc.*,⁸⁶ the court stressed the role of Rule 26(f) under the 2006 Amendments in refusing a belated attempt to seek metadata. A party seeking production of metadata or embedded data should therefore identify its interest in its production promptly so as to allow the producing party to attempt to accommodate the request or raise an appropriate objection, as is implicitly provided in Rule 34(b).⁸⁷ An early and practical agreement is the preferred outcome,⁸⁸ and failure to discuss the issue or make a specific request waives objection to production without the specific metadata or embedded data.⁸⁹ Typically, where the issue is contested in a timely fashion, courts require a showing of particularized need⁹⁰ or relevance⁹¹ before ordering production of metadata and embedded data.⁹²

⁸⁶ *Kentucky Speedway, LLC v. Nat'l Ass'n of Stock Car Auto Racing, Inc.*, No. 05-138-WOB, 2006 U.S. Dist. LEXIS 92028, at *23 (Dec. 18, 2006) (“[T]he issue of whether metadata is relevant or should be produced is one which ordinarily should be addressed by the parties in a Rule 26(f) conference.”).

⁸⁷ See FED. R. CIV. P. 34(b) (“If objection is made to the requested form or forms for producing electronically stored information – or, if no form was specified in the request – the responding party must state the form or forms it intends to use.”).

⁸⁸ See *In re Celexa and Lexapro Prod. Liab. Litig.*, No. MDL 1736, 2006 WL 3497757, at *3 (E.D. Mo. Nov. 13, 2006) (involving a comprehensive agreement to produce ESI in “any format that generally is searchable and manageable (including native file format or as single page TIFF images with ASCII Text . . . and the following, to the extent applicable, as metadata: author, recipient, date, subject line).”).

⁸⁹ *Kentucky Speedway*, 2006 U.S. Dist. LEXIS 92028, at *21-23 (ruling that Rule 34(b) does not require production of metadata absent a showing of a particularized need and failure to raise issue prior to production waives objection).

⁹⁰ See *Wyeth v. Impax Lab.*, No. Civ. A. 06-222-JJF, 2006 WL 3091331, at *2 (D. Del. Oct. 26, 2006) (ruling that production in native format was not required in the absence of foreseeable or necessary requirement for accessing metadata); *accord*, SEDONA PRINCIPLES, *supra* note 34, at Principle 12 (“Unless it is material to resolving the dispute, there is no obligation to preserve and produce metadata absent agreement of the parties or order of the court.”).

⁹¹ See *Hagenbuch v. 3B6 Sistemi Elettronici Industriali S.R.L.*, No. 04 C 3109, 2006 WL 665005, at *3 (N.D. Ill. Mar. 8, 2006) (metadata ordered produced because relevant to establishing chronology of case).

⁹² Some decisions requiring production in native format do not explain the basis for their ruling. See *Nova Measuring Instruments Ltd. v. Nanometrics, Inc.*, 417 F. Supp.2d 1121,

[30] Under amended Rule 34(b), if a party has not requested a particular form or forms of production and no agreement or a court order exists, a producing party has the option to produce either in the form or forms “in which [ESI] is ordinarily maintained” or in a “reasonably useful” format. The reference to the form in which it is maintained appears to encompass production in some variation of native file format with appropriate metadata and embedded data determined by the type of ESI involved.⁹³ The “reasonably useable” option allows for production in other formats,⁹⁴ provided that any metadata or embedded data necessary to make the format comparably useful to the way it is available to the producing party, especially in regard to search capabilities, is also furnished.⁹⁵

[31] The need for metadata and embedded data varies depending upon the type of ESI involved and the issues in the case. In actual practice, the topic is negotiated on a case-by-case basis. Parties frequently agree to produce e-mail in convenient and difficult to alter forms that faithfully preserve the appearance of the content so that the images of individual

1122 (N.D. Cal. Mar. 6, 2006) (ordering production in native format because producing party “offers no reason why” the order should not issue); *accord In re Verisign, Inc. Sec. Litig.*, No. C 02-02270 JW, 2004 WL 2445243, at *3 (Mar. 10, 2004) (upholding prior order of magistrate judge as not clearly erroneous because redaction and bates numbering difficulties do not “transcend all reasonableness.”). It was possible to read the former Rule 34 as requiring production of “identical” copies, including information not ordinarily visible to a viewer. *See Hagenbuch*, 2006 WL 6605005 at *3. Amended Rule 34(b) clarifies that this is only one of several options available to a producing party in the absence of a request and an agreement or court order to that effect.

⁹³ *See* Thomas Y. Allman, *The Impact of the Proposed Federal E-Discovery Rules*, 12 RICH. J. L. & TECH. 13 at *21, n. 72 (2006) (noting the observation by some Advisory Committee members that to “technically adept lawyers and experts” the reference could include metadata and embedded data).

⁹⁴ *See* Production – Form of Production, EDRM Project, *available at* http://www.edrm.net/wiki/index.php/Production_-_Form_of_Production (differentiating between production in Paper, Quasi-Paper, Quasi-Native and Native).

⁹⁵ *See* FED. R. CIV. PRO. 34(b) (COMM. NOTE).

But [this option] does not mean that a responding party is free to convert electronically stored information from the form in which it is ordinarily maintained to a different form that makes it more difficult or burdensome for the requesting party to use the information efficiently in the litigation. If the responding party ordinarily maintains the information it is producing in a way that makes it searchable by electronic means, the information should not be produced in a form that removes or significantly degrades this feature. *Id.*

pages can be Bates numbered and readily used in depositions and at trial.⁹⁶ Such page image production formats, principally the Tagged Image File Format (“TIFF”) and Adobe Portable Document Format (“PDF”) are typically accompanied by “load files,” i.e., ancillary files containing textual content and relevant metadata. In other cases, such as production of spreadsheets, sound recordings, animated content, web pages, video and drawings (which do not lend themselves to production in imaged form) or large databases, production is often best accomplished in “native” or “quasi-native” file formats because of the complexity involved.⁹⁷

[32] In any event, absent an agreement to the contrary, it is advisable to preserve sources of ESI covered by a litigation hold in their native file formats if there is any possibility that metadata or embedded data relating to that ESI may be deemed material. This preserves the ability to prepare an appropriate extract of any metadata which may be required or to make production in some variant of a native file format or in native file format. In the leading case of *In re Priceline.Com Inc., Securities Litigation*,⁹⁸ the court ordered production in “TIFF” and “PDF form but required the original data be maintained in its original native file format for the duration of the litigation. Indeed, a failure to maintain ESI in native format pending production arguably constitutes spoliation by a party on notice of its possible use, since discoverable metadata and embedded data are no different than other forms of ESI.⁹⁹

E. THE LIMITED “SAFE HARBOR”

[33] In response to advocacy for a bright-line “safe harbor” for parties that act reasonably in discharging preservation obligations,¹⁰⁰ Rule 37(f)

⁹⁶ See *Ponca Tribe of Indians of Okla. v. Cont’l Carbon Co.*, No. CIV -05-445-C, 2006 WL 2927878, at *2-3 (W.D. Okla. Oct. 11, 2006) (approving production of the “equivalent of pictures of the e-mails” and denying request for production in “their native electronic format.”).

⁹⁷ Production, *supra* note 94.

⁹⁸ *In re Priceline.Com Inc., Sec. Litig.*, 233 F.R.D. 88, 91 (D. Conn. 2005).

⁹⁹ See, *In re Telxon Corp. Sec. Litig.*, No. 5:98CV2876, 1:01CV1078, 2004 WL 3192729 *passim* (N.D. Ohio 2004) (noting concern over explanations for changes in metadata).

¹⁰⁰ See, e.g., *Proposals to Reform the Fed. Rules Regarding E-Discovery: Public Hearing on Proposed Amendments to the Fed. Rules of Civil Procedure Before the Comm. on Rules of Practice and Procedure of the Judicial Conf. of the United States* (Feb. 11, 2005) (statement of Lawrence La Sala, Association of Corporate Counsel (ACC) (04-CV-

tempers the sanctions which may be assessed after certain routine losses of ESI.¹⁰¹ If a party has acted in “good faith” in executing its preservation obligations, no rule-based sanctions are to be imposed,¹⁰² even if that loss involved a failure to preserve under the applicable substantive law, unless it occurs under “exceptional circumstances.”¹⁰³ The Advisory Committee noted that “good faith” conduct is measured by the reasonableness of actions undertaken regarding preservation,¹⁰⁴ and a loss is protected even when it involves human actions in carrying out the routine operations.¹⁰⁵ Exclusion from the “safe harbor”¹⁰⁶ requires a showing of more than mere negligence, although proof of reckless or willfulness is not required.¹⁰⁷

[34] Rule 37(f) reflects the fact that in the world of electronic information, it is simply not fair to assume that a loss of ESI necessarily equates to intent to destroy evidence.¹⁰⁸ As explained by *Turner v. Resort*

095)) (threat of sanctions has delayed implementation of legitimate corporate policies) (04-CV-095) at 361, 370, *available at* <http://www.uscourts.gov/rules/e-discovery.html>.

¹⁰¹ FED. R. CIV. P. 37(f) (“Absent exceptional circumstances, a court may not impose sanctions under these rules on a party for failing to provide electronically stored information lost as a result of the routine, good-faith operation of an electronic information system.”).

¹⁰² See Robert R. Summers, “Good Faith” in *General Contract Law and the Sales Provisions of the Uniform Commercial Code*, 54 VA. L. REV. 195, 201 (1968) (stating that use of “good faith” operates to exclude actions undertaken in bad faith). See generally Robert R. Summers, *The General Duty of Good Faith – Its Recognition and Conceptualization*, 67 CORNELL L. REV. 810 (1982) (summarizing the meaning of “good faith” in a variety of contexts).

¹⁰³ See FED. R. CIV. P. 37(f). Rule 37(f) is also inapplicable to adjustments in the quantity of depositions or other discovery which may be required by the loss of relevant responsive information to discovery. See FED. R. CIV. P. 37(f) (COMM. NOTE).

¹⁰⁴ See Advisory Committee Report, *supra* note 2, at C-86 (suggesting that good faith under Rule 37(f) is “measured by [the] efforts to arrange for the preservation of information on [a] system.”).

¹⁰⁵ The Advisory Committee cited “recycle[ing] storage media kept for brief periods against the possibility of a disaster that broadly affects computer operations” as one example of a routine operation which might be covered. FED. R. CIV. P. 37(f) (COMM. NOTES) .

¹⁰⁶ Others refer to it as a “guidepost” or “beacon.”

¹⁰⁷ See Advisory Committee Report, *supra* note 2, at C-83. Rule 37(f) should be seen as limiting the impact of *Residential v. DeGeorge Fin. Corp.*, 306 F.3d 99, 107-108 (2d Cir. 2002) (authorizing sanctions in the Second Circuit for merely negligent conduct).

¹⁰⁸ See *In re Seroquel Prods. Liab. Litig.*, MDL Docket No. 1769, 2007 WL 219989, at *6 (M.D. Fla. Jan. 26, 2007). Case Management Order No. 2 provides that the failure to

Condominiums International LLC, Rule 37(f) constitutes a policy decision which “recognizes that discovery should not prevent continued routine operation of computer systems.”¹⁰⁹ Not all commentators are enthusiastic about the Rule and it remains to be seen exactly how courts will apply it.¹¹⁰

[35] Rule 37(f) may have only limited impact on courts relying upon their inherent power since the Rule expressly relates only to rule-based sanctions.¹¹¹ However, a more likely result is that Rule 37(f) will come to serve, as it did in *Convolve Inc. v. Compaq Computer Corporation*,¹¹² as persuasive guidance when the factual pattern is one which would be impacted if the court were proceeding under the Federal Rules.¹¹³ When complex information systems are involved, something almost always “slip[s] through” the implementation of even the most reasonable and comprehensive of preservation efforts.¹¹⁴

preserve every potentially relevant document, data or tangible thing “shall not in and of itself mean that said party has engaged in spoliation of evidence.” *Id.*

¹⁰⁹ *Turner v. Resort Condos. Int’l LLC*, 2006 WL 1990379, at *6, n.2 (S.D. Ind. July 13, 2006) (refusing to issue sanctions for alleged failures in preservation where there was no bad faith alteration or destruction of evidence).

¹¹⁰ Academic commentators in particular find Rule 37(f) to be troubling. See, e.g. Maria Perez Crist, *Preserving the Duty to Preserve: The Increasing Vulnerability of Electronic Information*, 58 S.C.L. REV. 7, *54 (2006) (“[B]y requiring stringent standards of culpability and clear showings of relevance and prejudice, the threat of sanctions becomes a paper tiger.”). See generally Thomas Y. Allman, *Rule 37(f) Meets Its Critics: The Justification for a Limited Safe Harbor for ESI*, 5 NW. J. TECH. & INTELL. PROP. 1 (2006) (reviewing and rebutting the criticisms and dire predictions about Rule 37(f)).

¹¹¹ See *In re Napster, Inc. Copyright Litig.*, No. C MDL-00-1369 MHP, 2006 WL 3050864, at *12, n4 (N.D. Calif. Oct. 25, 2006) (“[S]anctions imposed pursuant to a court’s inherent powers [are] governed by a different set of principles than sanctions under Rule 37.”).

¹¹² *Convolve, Inc. v. Compaq Computer Corp.*, 223 F.R.D. 162 (S.D.N.Y. 2004).

¹¹³ Rule 37(f) reflects a collective judgment by the Judicial Conference of the United States, the Supreme Court and Congress that protection from sanctions should predominate over other considerations in the limited area of losses from routine operations of information systems.

¹¹⁴ MINUTES OF CIVIL RULES ADVISORY COMMITTEE MEETING 18 at 755 (Apr. 15-16, 2004), <http://www.uscourts.gov/rules/Minutes/CRAC0404.pdf>, (noting that, “[r]easonable steps do not always preserve everything. Things slip through. That is the point of the safe harbor.”).

III. IMPLEMENTING PRESERVATION OBLIGATIONS

[36] The execution of preservation obligations can involve the collection, storage and preservation of massive amounts of ESI.¹¹⁵ Effective implementation requires an inter-disciplinary team approach, led by legal counsel and supported by Information Technology and, in some instances, Records Management or other relevant functional or business units of the entity. Where applicable, outside counsel and third-party service providers may also play a role. The issue is how to best manage this process in a reasonable manner while maintaining a sense of proportion in the case.

A. PRESERVATION MECHANICS

[37] The steps needed to effectuate preservation vary with the types of data involved and the characteristics of the sources on which it is stored.

1. GENERALLY

[38] The principal types of discoverable ESI are “active data” which do not require any restoration (such as e-mail applications, database programs or word processing applications) and “archival” data (such as that transferred to peripheral media such as CDs, tapes, disks, or network servers or the internet) which may require some effort to access.¹¹⁶

¹¹⁵ See Law.com, Legal Technology: *E-Discovery Roadmap*, <http://www.law.com/jsp/legaltechnology/eDiscoveryRoadmap.jsp> (last visited March 19, 2007). A vivid graphic used by some commentators portrays “preservation” as the large opening at the front end of a funnel leading to a smaller opening at the opposite end with production of discoverable information after “culling” for relevancy and privilege. To paraphrase the common wisdom, “the obligation to preserve is more extensive than the obligation to produce.”

¹¹⁶ Whitney Adams and Jeffery Jacobs, *Ghost in the Machine: Legal Developments and Practical Advice in an Age of Electronic Discovery*, 22 NO. 7 ACC Docket 48, at *70 (2004) (“[Active Data] is [c]urrent files on the computer that can be displayed without using a restoration process. Active data are visible in directories and can be viewed in plain text files or with a computer program, such as small applications, database programs, or word processing applications. Active data [also] includes system data in a recycle bin, history files, temporary internet directory and other data caches.”). Adams and Jacobs differentiate “active” data from “archival” data, which they define as information which requires restoration. *Id.*, at *70 (discussing data which has been

Potentially discoverable information of this nature can best be preserved by implementation of an appropriate “litigation hold” tailored to the specifics of the case. However, in doing so, serious consideration must be given to any automatic features which may delete or overwrite active data, including any policies or processes which involve destruction of hard copy documents or other things subject to the litigation hold.

[39] Many useful suggestions for implementing litigation holds are available in the literature authored by experienced practitioners.¹¹⁷ A common thread to these suggestions is diligence in locating and taking affirmative action.¹¹⁸ Data can be left in place for management by custodians subject to the litigation hold or it can be immediately collected according to appropriate parameters. Export or collection is usually done in native file formats to preserve the ability to access any of the metadata and embedded data, an end easily frustrated by use of inappropriate duplication methods. Creating a mirror image of the data is typically not required absent an agreement or court order or some reason to suspect potential alteration or deliberate actions to destroy evidence.

2. BACKUP MEDIA

[40] Most e-mail systems are “backed up” by periodic creation of a duplicate copy (“snapshot”) of active information at a fixed point in time

transferred to peripheral media such as CDs, tapes, disks, or network servers or the internet). Preservation obligations and the scope of litigation holds apply to both types of information and appropriate consideration must be given to both in the planning process.

¹¹⁷ “The safest practice is to preserve the current or ‘active’ inbox, outbox, deleted items, and other e[-]mail folders of the key players involved in the potential litigation, as well as other electronic documents stored on such individuals’ local computers or shared file servers.” Ashley Watson, Deidre Paknad, Mark A. McCarty and Leigh R. Rhoads, *Successful Corporate Strategies for Preservation Post Zubulake and Morgan Stanley*, at *3 (2005), available at

<http://www.pss-systems.com/resources/PreservationStrategies.pdf>.

¹¹⁸ See, e.g., the method approach advocated in Stephen M. Cutler, Laurie M. Stegman & Paul M. Helms, *Document Preservation and Production in Connection with Securities and Exchange Commission Investigations and Enforcement Actions*, 1517 PRAC. LAW INST. 579, 593-594 (2005) (“[I]t is probably advisable to . . . retain documents and backup tapes for relevant personnel, to catalog documents later created by these personnel in a separate electronic file, and to create a mirror-image of the computer system at the time the duty to preserve attaches.”).

in order to allow for recovery of the information in the event of loss of functionality or other disasters.¹¹⁹ Backups are usually recorded on magnetic tapes, which are sometimes sought in discovery because they can hold discoverable information deleted from active sources.

[41] A difficult issue is determining what steps, if any,¹²⁰ to take with regard to existing copies of backup media scheduled for recycling. Withdrawing backup tapes from routine rotation in anticipation of possible production can be expensive and disruptive.¹²¹ Production from such sources can be accomplished, however, only if the backup media are preserved. The Committee Note to Rule 37(f) suggests that a key factor in deciding whether that should happen is whether a party believes the information to be discoverable and not available on other more accessible sources.¹²²

[42] The cases are far from uniform on the need to routinely interrupt the recycling of existing backup media.¹²³ The Sedona Principles caution

¹¹⁹ See generally Eric Friedberg, *To Recycle or Not to Recycle, That is the Hot Backup Tape Question*, 201 PLI/CRIM 205, 211-212 (2006).

¹²⁰ See Standing Committee Note, *supra* note 2, at Rules 33 (“There is considerable uncertainty as to whether a party must, at risk of severe sanctions, interrupt the operation of the electronic information systems it is using to avoid any loss of information because of the possibility that the information might be sought in discovery.”). The Advisory Committee Report identified the recycling of backup as a “routine” operation of an information system which, if conducted in good faith, should be exempt from rule-based sanctions by virtue of Rule 37(f). See Advisory Committee Report, *supra* note 2, at Rules App. C-83.

¹²¹ Large organizations often recycle hundreds of backup tapes every two or three weeks and placing a litigation hold on recycling can result in large expenses if the holds are maintained even for a short period of time. The Advisory Committee Report described backup media as an example of an inaccessible source because it is “often not indexed, organized, or susceptible to electronic searching.” See Advisory Committee Report, *supra* note 2 at Rules App. C-42.

¹²² See FED. R. CIV. P. 37(f) (COMM. NOTE) (“One factor [as to whether a party should take steps to prevent overwriting] is whether the party reasonably believes that the information on such sources is likely to be discoverable and not available from reasonably accessible sources.”).

¹²³ See *Concord Boat Corp. v. Brunswick Corp.*, No. LR-C-95-781, 1997 WL 33352759 at *4 (E.D. Ark. Aug. 29, 1997) (“[T]o hold that a corporation is under a duty to preserve all e-mail potentially relevant to any future litigation would be tantamount to holding that the corporation must preserve all e-mail.”). But compare the case of *Zubulake IV*, where the Court noted that “if a company can identify where particular employee documents are

against reliance on backup media for production purposes,¹²⁴ and Comment 5h to Sedona Principle 5¹²⁵ states that preservation obligations do not extend to backup media “absent special circumstances.”¹²⁶ Nonetheless, the reported sanctions from failures to preserve backup media give pause. It is hardly surprising, therefore, that blanket suspensions of recycling of existing media are often recommended by outside counsel,¹²⁷ thus creating even more problems for the future. The remedy suggested by the Advisory Committee in the 2006 Amendments is that parties reach an early and practical agreement¹²⁸ on how backup media should be handled.¹²⁹

[43] The challenge is to achieve practical compromises which minimize burdens and costs without incurring undue risks of spoliation. One approach is to retain only the most recently created full backup along with

stored on back-up tapes, then the tapes storing the documents of ‘key players’ to the existing or threatened litigation should be preserved if the information contained on those tapes is not otherwise available.” *Zubulake IV*, 220 F.R.D. 212, 218 (S.D.N.Y. 2003).

¹²⁴ See SEDONA PRINCIPLES, *supra* note 15, at Principle 8 (“Resort[ing] to disaster recovery backup tapes and other sources of data and documents requires the requesting party to demonstrate need and relevance that outweigh the cost, burden, and disruption of retrieving and processing the data from such sources.”).

¹²⁵ See SEDONA PRINCIPLES, *supra* note 15, at Principle 5 (“The obligation to preserve electronic data and documents requires reasonable and good faith efforts to retain information that may be relevant to pending or threatened litigation. However, it is unreasonable to expect parties to take every conceivable step to preserve all potentially relevant data.”).

¹²⁶ The Sedona commentary rests on the assumption that few or little unique evidence will be found and recommends use of sampling techniques to ascertain the accuracy of that statement if in dispute.

¹²⁷ See Friedberg, *supra* note 119, at 223 (emphasizing the complexities of applying different preservation requirements to different data sets in the face of multiple holds).

¹²⁸ Absent such an agreement, a potential producing party may have little choice but to suspend a broad spectrum of backup media. In *Zubulake IV*, the court concluded that it was at least negligent conduct to fail to preserve “potentially relevant backup tapes” once a preservation obligation attached and that in “at least this Court,” any “backup tapes that can be identified as storing information created by or for ‘key players’ must be preserved.” *Zubulake v. UBS Warburg L.L.C.*, 220 F.R.D. 212, 220 n.47 (S.D.N.Y. 2003).

¹²⁹ See FED. R. CIV. P. 26(b)(2)(B) (COMM NOTE) (“Whether a responding party is required to preserve unsearched sources of potentially responsive information that it believes are not reasonably accessible depends on the circumstances of each case. It is often useful for the parties to discuss this issue early in discovery.”).

selected copies from relevant time frames.. In the case of *In re Celexa and Lexapro Products Liability Litigation*, the producing party created a set of backup tapes at the outset of litigation and set them aside for purposes of future discussion. After negotiations, the parties entered into an agreed order that provided that the defendant would preserve those backup tapes but would otherwise resume recycling.¹³⁰ Disruption of existing backup tape rotation routines may not be required where the underlying dispute is strictly historic or where communications are not likely to be decisive.¹³¹ As a leading commentator has noted, “[c]ounsel should be especially wary of requiring the client to suspend backup tape rotation where the litigation is far removed in time from the underlying events.”¹³²

[44] In contrast, the necessity of halting the recycling of *future* backup media after they are created can be avoided by instituting effective alternative methods of preserving information that is subject to deletion, coupled with aggressive monitoring of the process.¹³³

[45] Preferably, any disagreements over recycling should be resolved by consultation. When this is not possible,¹³⁴ a producing party which establishes a litigation hold in a reasonable manner¹³⁵ and in good faith,¹³⁶

¹³⁰*In re: Celexa and Lexapro Prods. Liab. Litig.*, No. MDL 1736, 2006 WL 3497757, at *2 (E.D. Mo. Nov. 13, 2006).

¹³¹ Antitrust actions relating to past events are typical of this genre. See *Concord Boat Corp. v. Brunswick Corp.*, No. LR-C-95-781, 1997 WL 33352759 at *4 (E.D. Ark. Aug. 29, 1997) (“[T]o hold that a corporation is under a duty to preserve all e-mail potentially relevant to any future litigation would be tantamount to holding that the corporation must preserve all e-mail.”).

¹³² Friedberg, *supra* note 119, at 214.

¹³³ Individual custodians can be asked to drag and drop copies of relevant e-mails they send to a secure networked location.

¹³⁴ Preservation decisions on backup media may have to be made before an opposing counsel is involved or litigation has commenced. It is also conceivable that it may be impractical or unduly expensive to seek immediate court relief, which may not be available due to caseload or other considerations.

¹³⁵ See *Delta Fin. Corp. v. Morrison*, 13 Misc.3d 604 (N.Y. Sup. Aug. 17, 2006) (managing production taking into account that interim backup tapes largely contained duplicative material). The Court in *Delta Financial* used a limited sample search approach coupled with limited cost shifting to determine if a full search was needed of those backup tapes whose contents were available. See *generally id.*

should be deemed to have satisfied its preservation obligations, as is implicit in Rule 37(f). However, where the risks of non-production are deemed to be unacceptable, a party may have little choice but to temporarily suspend rotation and seek an immediate court order for a protective order testing the adequacy of the steps undertaken.

3. DYNAMIC INFORMATION

[46] When information is constantly overwritten, preservation obligations can be difficult or impossible to execute.¹³⁷ One cannot preserve what does not exist.¹³⁸ Information on relational databases is often stored in a manner which does not permit ease of access in any manner other than a programmed inquiry.¹³⁹ The Advisory Committee noted that “many database programs automatically create, discard, or update information” and “that suspending or interrupting these features can be prohibitively expensive and burdensome.”¹⁴⁰

¹³⁶ See FED. R. CIV. P. 37(f) (COMM. NOTE) (“Whether good faith would call for steps to prevent the loss of information on sources that the party believes are not reasonably accessible under Rule 26(b)(2)(B) depends on the circumstances of each case.”).

¹³⁷ A similar problem can exist with some forms of instantaneous communications, such as chat rooms, IM, etc. where no provisions for preservation exist. See, e.g., *Malletier v. Dooney & Bourke, Inc.*, No. 04 Civ.5316 RMB MHD, 2006 WL 3851151, at *2 (S.D.N.Y. 2006) (no duty to preserve chat room comments prior to installation of software permitting it).

¹³⁸ The focus of Rule 34(a) is on electronically *stored* information. Many databases continuously add new data to their tables rather than overwrite it and contain enormous volumes of data points that are typically assembled into meaningful sets based on specific queries or functions conducted by users.

¹³⁹ The Advisory Committee cited the “distinctive” features of databases as one of the justifications for the Rule 37(f) limitation on sanctions for pre-discovery failures to preserve (“[M]any database programs automatically create, discard, or update information without specific direction from, or awareness of, users [and] are essential to the operation of electronic information systems.”). Advisory Committee Report, *supra* note 2, at C-83. The Committee cited databases as examples from “current” technology of sources which were inaccessible to production because of undue burdens and costs of access. See Advisory Committee Report, *supra* note 2, at C-42 (“[D]atabases that were designed to create certain information in certain ways and that cannot readily create very different kinds or forms of information.”).

¹⁴⁰ Advisory Committee Report, *supra* note 2, at C-83. See also *Proctor & Gamble Co. v. Haugen*, 427 F. 3d 727 (10th Cir. 2005) (finding that absent an agreement or a court order mandating preservation of a dynamic database, a failure to preserve is not necessarily spoliation).

[47] While Rule 34(a) provides authority for compelling a recalcitrant party to either produce the information or to allow direct access to the database,¹⁴¹ the duty to preserve does not require a party to undertake to create storage systems or install software.¹⁴² For example, in *Convolve Inc. v. Compaq Computer Corp.*,¹⁴³ sanctions were unsuccessfully sought for the failure to act affirmatively to preserve representations of electronic data portrayed on an oscilloscope each time a new parameter was tested.¹⁴⁴ No requirement to do so existed as a matter of business practice and no steps had been taken to require that it be done.¹⁴⁵ The Magistrate Judge noted that the information portrayed, in contrast to the stored text of an e-mail, was fleeting or “ephemeral” and, unless stored, existed on the screen only until the next adjustment was made.¹⁴⁶

¹⁴¹ See FED. R. CIV. P. 34 (COMM. NOTE) (“The addition of testing and sampling to Rule 34(a) with regard to documents and electronically stored information is not meant to create a routine right of direct access to a party’s electronic information system, although such access might be justified in some circumstances.”). See also *In re: Ford Motor Co.*, 345 F.3d 1315, 1317 (11th Cir. 2003) (mandamus granted to prevent direct access to database for abuse of discretion in absence of findings of discovery misconduct by Ford).

¹⁴² In *Lenker v. Nat’l Serv Indust.*, No. 2:04-cv-0523, 2006 WL 1995610, at *1 (S.D. Ohio, July 14, 2006), the court denied a request for direct access to computer software to run calculations it would have liked to have had because “a party is not required to provide previously non-existing estimates of such information.” See also *Paramount Pictures Corp. v. Replay TV*, CV 01-938 FMC (Ex), 2002 WL 32151632, at *3 (C.D. Cal. May 30, 2002). The court stated that in order to collect the information, “defendants would be required to undertake a major software development effort, incur substantial expense, and spend approximately four months doing so.” *Id.*

¹⁴³ See *Convolve, Inc. v. Compaq Computer Corp.*, 223 F.R.D. 162 (S.D.N.Y. 2004).

¹⁴⁴ *Id.* at 169. The argument was that the engineer had a duty to “print” out the information on the screen or to save the information to a disk, despite the fact that this was not a normal business practice.

¹⁴⁵ See *Getty Props. Corp. v. Raceway Petroleum, Inc.*, No. Civ. A. 99-CV-4395DMC, 2005 WL 1412134, at *4 (D. N.J. June 14, 2005) (refusing sanctions for failure to preserve since “Raceway’s failure to create more reports than it used in the daily activities of its business is not the kind of willful action that discovery sanctions are intended to redress.”).

¹⁴⁶ *Convolve*, 223 F.R.D. at 177. Methods available to capture dynamic information often require an inordinate and extraordinary effort. One option, borrowed from the world of surveillance utilizes software programs with the capability of recording a series of rapid “screen shots” of onscreen activity. Affirmative steps can also be taken to locate hidden or fragmentary traces available through forensic examination. See *O’Brien v. O’Brien*, 899 So. 2d 1133, 1134 (Fla. Dist. Ct. App. 2005) (estranged wife installed a program on a home laptop which “took snapshots of what appeared on the computer screen.”).

[48] One approach to implementing preservation of snapshots of information on databases is to work out an arrangement, by agreement or court order, whereby agreed-upon queries of the database are made and recorded. The results may be saved in imaged format since extracting only the relevant data from a complex database application in a native format may not be feasible.¹⁴⁷

4. DELETED INFORMATION

[49] It is not unusual for a mirror image of the hard drive of a current or former employee to be sought early in cases involving alleged theft of intellectual property or in unfair competition disputes.¹⁴⁸ Even after deletion of files from the hard drives of individual computers, some traces remain in unallocated space not used for active storage and may be recovered. However, prompt action is often required since the continued operation of a computer can alter metadata and embedded data as well as hamper the ability to recover deleted information. Under the 2006 Amendments, courts will apply the “good cause” analysis of Rule 26(b)(2)(B) before granting such relief.¹⁴⁹

[50] Thus, the need to preserve individual hard drives may arise by virtue of anticipation of an emergency request to do so pursuant to a court order. Even absent such a potential request, however, if there is reason to suspect that deleted information on individual hard drives is or may become

¹⁴⁷ See Douglas Herman, *Digital Investigations - Where You Forgot to Look: Why Databases Often Are Overlooked When it Comes Time to Harvest Electronic Data*, METROPOLITAN CORP. COUNS., (Aug. 2006), available at <http://www.metrocorpcounsel.com/current.php?artType=view&artMonth=January&artYear=2007&EntryNo=5440> (last visited March 19, 2007) (“To extract data from a relational structure such as a CRM or ERP database, requires specific expertise and a solid understand of the underlying bases of how these databases work.”).

¹⁴⁸ See *Quotient, Inc. v. Toon, Inc.*, No. 13-C-05-64087, 2005 WL 4006493 (Md. Cir. Ct. Dec. 23, 2005) (using risk of overwriting data of possible evidentiary value that may exist in “unallocated clusters” as justification for ordering copying of hard drive because of “substantial probability” of loss or degradation in accessibility of deleted or undeleted e-mails, IMs and /or other files).

¹⁴⁹ See *Ameriwood Industries, Inc. v. Paul Liberman, et al.*, No. 4:06CV524-DJS, 2006 U.S. Dist. LEXIS 93380 at *15 (Dec. 27, 2006) (conducting good cause inquiry and setting conditions for discovery including payment of reasonable costs for three step procedure ordered).

material to a dispute, it may be appropriate to forensically preserve the contents of the hard drives.¹⁵⁰ If the proper utility is used and a forensically sound copy of the hard drive is made – sometimes called a “bit stream backup” (a sector-by-sector/bit-by-bit copy which preserves not only the files and directory structures, but also the latent data)¹⁵¹ – it may be possible to recover deleted information from the unallocated space at a later point in time.

5. LEGACY DATA

[51] Many parties have sources of “legacy” data¹⁵² in both ESI and hard copy form. ESI often resides on obsolete backup media (from which it cannot be easily extracted) or on un-indexed magnetic tapes sequestered pursuant to lapsed litigation holds.¹⁵³ In some industries, the amount of legacy information in paper form is also quite significant and often lacks meaningful indices.

[52] Absent an agreement with opposing parties, preservation decisions can be quite difficult. As noted earlier, identification of sources not being searched may have to be made under Rule 26(b)(2)(B) when there is a reason to believe that there may be discoverable information on that source.¹⁵⁴ The identification must include a description of the source by

¹⁵⁰ Some entities make it a routine practice to retain, intact, the hard drives of terminated employees for similar reasons. Different issues are involved in regard to preservation of the hard drives of networked servers because mirror images are not likely to be as successful in that context.

¹⁵¹ Computer forensic specialists use a number of applications, including Encase, SnapBack, Ghost, etc. See Whitney and Jacobs, *supra* note 116, at *70. See also *Krumwiede v. Brighton Assoc., L.L.C.*, No. 05C30003, 2006 WL 1308629 at *4 (N.D. Ill. May 8, 2006) (“[F]orensically valid copy of the laptop’s hard drive [was created] using EnCase software.”).

¹⁵² For these purposes, legacy data is information which exists in retrievable form but has not been indexed and is not currently (or recently been) in use.

¹⁵³ See *Linnen v. A. H. Robbins Co.*, No. 97-2307, 1999 WL 462015, at *3 (Mass. Super. Ct. June 16, 1999) (ruling that backup tapes in existence at the time a preservation obligation attaches are potentially subject to discovery even if the only reason they still exist is because of a litigation hold in another case).

¹⁵⁴ The form of production of any legacy information is to be addressed as part of Rule 26(b)(2)(B) analysis. See FED. R. CIV. P. 34 (COMM NOTE) (“The question of whether a producing party should be required to convert [legacy] information to a more usable

category or type¹⁵⁵ so that the requesting party can decide if it wishes to initiate a challenge to the decision to ignore that source.¹⁵⁶

[53] Obviously, a common sense rule of reason applies. Where the estimated time range and business or functional sources of the information are remote from any discoverable topics, the legacy information can be ignored. Targeted sampling may be used to help evaluate the contents of legacy sources. In the case of backup tapes, a date and user range can be established for a group of backup tapes and comparisons can then be made against an inventory of existing litigations holds.¹⁵⁷ A good faith effort to identify and list potentially discoverable sources should yield a presumptive finding that preservation obligations have been satisfied.

B. OFFENSIVE USE OF PROTECTIVE ORDERS

[54] The Advisory Committee decided, after the Public Hearings, to provide for immediate and direct access to the court so that “the responding party [can seek] to determine its search and potential preservation obligations by moving for a protective order.”¹⁵⁸

[55] Carefully framed preservation orders can help dispense with impractical preservation requirements as well as resolve the accessibility dilemma created by Rule 26(b)(2)(B). For example, an order can relieve

form, or should be required to produce it at all, should be addressed under Rule 26(b)(2)(B).”).

¹⁵⁵ To take an example, a party could identify the general nature of the legacy media (e.g., “backup tapes from e-mail servers in Division X for unknown years prior to 19XX.”).

¹⁵⁶ A regime of focused discovery, which might include sampling, may be needed to learn more about the burdens and costs involved as well as the value that a full restoration and search might bring.

¹⁵⁷ Specialist “extraction” vendors argue that it has become technically and economically feasible to open a “window” into backup tapes by concentrating on the tape header, file listings, custodian and .psts reports. See *Electronic Discovery: The Effect of the Proposed Amendments*, METROPOLITAN CORP. COUNS., at 30 (Dec. 2005), available at <http://www.metrocorp.counsel.com/current.php?artType=view&artMonth=December&artYear=2005&EntryNo=3949> (estimating the cost of preparing a catalog at about 20% of the cost of a full restoration and search).

¹⁵⁸ The Advisory Committee added language to Rule 26(b)(2)(B) after the Public Hearings to clarify that “the responding party may wish to determine its search and potential preservation obligations by moving for a protective order.” Advisory Committee Report, *supra* note 2, at C-50.

parties of the necessity of preserving backup media or duplicative copies of e-mail or otherwise resolve contentious but ambiguous preservation issues.¹⁵⁹ Moreover, a preservation order may contain allocation of any unusual or disproportionate costs involved in the litigation hold process. In *Treppel v. Biovail Corp.*,¹⁶⁰ the court noted that if it were required to issue a preservation order over objection, it could be accompanied by cost-shifting where information of only marginal relevance is ordered to be preserved.¹⁶¹

C. LITIGATION HOLDS

[56] A key initial decision in applying a litigation hold is whether to make an immediate preemptive collection or to await further clarification of the scope of potential discovery. The timing of any particular dispute is often unanticipated and the legal department may have significant competing obligations as they seek to retain outside counsel, struggle to fully understand the claims being made and try to anticipate the preservation steps that need to be taken. A narrow initial approach to scope is not without risk,¹⁶² however, and any approach should be periodically re-examined as the case proceeds.

[57] A related issue is the need to determine the file format in which information should be preserved. If data is collected before agreement has been reached on the form or forms of production, producing parties should

¹⁵⁹ See *In re St. Jude Medical, Inc., Silzone Heart Valves Prods. Liab. Litig.*, No. MDL 1396, 2002 WL 341019 (D.C. Minn. Mar. 1, 2002).

¹⁶⁰ *Treppel v. Biovail Corp.*, 233 F.R.D. 363 (S.D.N.Y. 2006).

¹⁶¹ *Id.* at 372. The Court concluded that while the tardy recognition of a preservation obligation was “cause for concern,” no showing had been made that the steps being undertaken at the time of the hearing on the motion, which included creating images of the hard drives of the individuals involved, were inadequate. See also *Kemper Mortgage, Inc. v. Russell*, No. 3:06-cv-042, 2006 WL 2319858, at *2 (S.D. Ohio Apr. 18, 2006) (stating that preservation costs cannot be shifted “at least in the absence of a demand for a litigation hold which seeks court enforcement and/or requests for discovery which can limit the amount of information which needs to be preserved”).

¹⁶² In *Consol. Alum. Corp. v. ALCOA*, a party initially failed, in the view of the court, to adequately define the key actors whose e-mail needed to be preserved at the time of an initial litigation hold. The Court tempered its subsequent award of monetary sanctions because the party took additional steps, including an expansion of the list of persons notified, segregations and sequestering of monthly backup tapes and creation of a “snapshot” of current email at the time of expansion. *Consol. Alum. Corp. v. ALCOA*, No. 03-1055-C-M2, 2006 WL 2583308, at *7 (M.D. La. July 19, 2006).

consider retaining information subject to a litigation hold in native file formats so as to preserve the ability to later review and produce any of the metadata or embedded data. In some situations, it may also be appropriate to create a “mirror image” of individual hard drives in order to preserve the option to make a full forensic analysis of the contents at a later time.

[58] Another imperative is to ensure that automatic features that may have the potential to destroy discoverable information are disabled and that persons that have the potential to destroy discovery information learn of their duty not to do so.¹⁶³ Many entities manage their e-mail storage by limiting the size of mailboxes or conducting sweeps to eliminate stale information which has not been used or accessed after a certain period. A party cannot exploit the routine operation of a system by allowing it to continue in order to destroy specific stored information of key players that it is otherwise required to keep.¹⁶⁴ The Committee Note to Rule 37(f) explains that such an approach would violate the duty to exercise good faith.¹⁶⁵

[59] Some of the other considerations involved in planning and executing the litigation hold include:

1. **Scope of Effort.** Identification of the relevant data sources, the period of time involved and the number of possible custodians is essential to designing and implementing the litigation hold. Some commercial or employment matters may involve a finite period of time at a point in the past. At the other end of the spectrum, matters involving business practices such as sales and marketing, pricing, or employment tend to involve vast amounts of information, large numbers of custodians, very diverse data types,

¹⁶³ See *Miller v. Holzmann*, CA No. 95-01231 (RCL/JMF), 2007 WL 172327, at *5 (D. D.C. Jan. 17, 2007) (referencing the need of counsel to deal with programming of computers to destroy information after a period of time).

¹⁶⁴ See *Tantivy Commc'ns, Inc. v. Lucent Techs., Inc.*, No. Civ.A.2:04CV79, 2005 WL 2860976 at *2 (E.D.Tex. Nov. 1, 2005) (stating that party and counsel permitted loss of relevant documents and ESI due to system operations without credible explanation).

¹⁶⁵ FED. R. CIV. PRO. 37(f) (COMM. NOTE) (“When a party is under a duty to preserve information because of pending or reasonably anticipated litigation, intervention in the routine operation of an information system is one aspect of what is often called a ‘litigation hold.’”).

and often involve both historic and forward-looking operations. In that context, the preservation and collection plans can be complex, multi-faceted, and fraught with risk and difficulty.

2. **Affected Custodians.** There can be a variety of possible custodians to be notified of the litigation hold. Some have responsibility and privileges of access as managers of systems or databases. Others have a more personal or direct involvement as potential users of PCs or as managers of hard-copy filing systems. Record coordinators can function as stewards of data stored at their paper warehouses and may also have responsibility for dispersed storage of records.
3. **Hard-Copy Storage.** Preservation obligations apply to all forms of information, not just ESI. Accordingly, affirmative action should be taken to suspend destruction of relevant hard copy information pursuant to storage or records destruction policies or related internal requirements.
4. **Monitoring of Compliance.** Tracking actual compliance with litigation holds and furnishing reminders is particularly important where there is a significant time lag between original notification and the complete collection of data or if multiple or completing litigation holds are in effect. The ability to cross-check information about custodians, systems, and continuing holds is an essential attribute of any system designed to accomplish compliance monitoring. Consideration should also be given to reducing the potential for custodian confusion as to which preservation obligations remain in place and which have ceased.
5. **Change Management.** As noted, when the scope of discovery becomes more established, the nature and scope of the litigation hold will have to change as well.
6. **Coordination with Other Holds.** As new holds arise, checks should be made to determine if the information required is already preserved through other litigation holds.

7. **Disclosure to Opposing Counsel.** The details of the litigation hold process should be candidly disclosed to opposing counsel.

IV. CONCLUSION

[60] The identification and resolution of preservation disputes without resort to post-production sanction practice is crucial to the success of the 2006 E-Discovery Amendments. The enhanced “litigation hold” process described in this article can help meet that objective. Moreover, a judicious use of the spirit and intent of the limited “safe harbor” should help provide guidance for courts and parties facing the need to resolve any preservation disputes which may remain.