

Howard Klee papersMSS.2012.04

Howard Klee papers
1988-1995



Title Statement

Howard Klee papersMSS.2012.04

Publication Statement

Publisher: Arthur J. Morris Law Library Special Collections

Arthur J. Morris Law Library
580 Massie Road
University of Virginia
Charlottesville, Virginia 22903
archives@law.virginia.edu
URL: <http://archives.law.virginia.edu/>



SCHOOL of LAW

Profile Description

Creation: This finding aid was produced using ArchivesSpace on 2026-04-30 21:13:19 +0000.

Language Usage: Description is written in: English, Latin script.

Descriptive Rules: Describing Archives: A Content Standard

Descriptive Summary

Unit ID

MSS.2012.04

Unit ID

[Archival Resource Key](#)

Unit ID

[Previous Archival Resource Key](#)

Unit ID

[/repositories/4/resources/728](#)

Unit Date

1988-1995

Language

English

Creator

Klee, Howard

Extent

2.5 Linear Feet 7 boxes

Repository

Arthur J. Morris Law Library Special Collections

Administrative Information

Immediate Source of Acquisition

These files were donated to Special Collections by Howard Klee, on the recommendation of Professor Jonathan Cannon, in 2012.

Biographical / Historical

*Biographical information cited from WBCSD website

Klee graduated from Williams College with a bachelor's degree in chemistry, and he went on to earn a Ph.D. in chemical engineering from MIT. During the years of the Amoco-U.S. EPA Pollution Prevention Project, Klee worked as a co-manager for Amoco. Following his work at Amoco, Klee worked with Chevron and BP, serving both executive and business functions that involved strategic planning, business development, environmental affairs, and manufacturing. In addition, Klee served on President Clinton's Council on Sustainable Development, and he also worked as the director for the Foundation for Research on Economics and the Environment. In addition, Klee has experience in academia, holding faculty appointments at the University of California-Davis, the University of Michigan, and the University of Geneva. After the conclusion of the Amoco-EPA Pollution Prevention Project, Klee authored a number of texts related to the project, and in 2012 BiblioGov published a book by the U.S. EPA related to the Yorktown project, which included many of Klee's findings. Howard Klee worked a director of two programs for the World Business Council for Sustainable Development (WBCSD): the Cement Sustainability Initiative and Tire Industry Project.

*Historical information

In recent years, environmental regulation has come to the forefront with such cases as *Massachusetts v. Environmental Protection Agency* (2007) and *Exxon Shipping Co. v. Baker* (2008). However, environmental regulation has a longer history in Virginia. In 1989, Amoco Oil Company (Amoco) and the US Environmental Protection Agency (EPA) agreed to a voluntary, joint pollution-prevention project that would focus on Amoco's refinery in Yorktown, Virginia. Yorktown was an especially exciting place to undertake this study, as it would provide the opportunity to study pollution prevention at a working industrial facility. The Amoco-EPA project was one of the first of its kind, combining efforts of a major oil company and the EPA to determine methods to reduce air, land, and water pollution during the oil refinement process.

Over the course of nearly six years, a number of workgroups provided oversight and direction, as the project used a multi-media sampling program to identify potential pollutions sources at the Amoco Refinery in Yorktown. The work groups' findings were peer reviewed, and workshops were convened in which persons from various professional backgrounds met at the facility to conduct research and provide input into the project. In addition, separate engineering projects identified the major sources of pollution, and they later simulated the effects of implementing pollution-reduction measures. Engineers worked together to assess environmental impacts, costs, risk reduction for people living near the facility, and any liability that could be incurred by the refinery.

A final executive summary issued by the project explained that it had hoped to accomplish a set of goals for pollution prevention: the inventory of refinery releases, including their "chemical type, quantity, source, and medium of release"; the development of various options to reduce those releases; the ranking of various options based on a set of criteria and professional perspectives; the identification and evaluation of factors that inhibit pollution prevention in practice; and the enhancement of the "participants' knowledge of refinery and regulatory systems." The accompanying data records the success of the project.

In addition to being one of the first projects to engage both corporate and government efforts to reduce pollution, it also exhibited a nuanced multidisciplinary effort, involving participants from a variety of disciplines in the sciences and humanities, as well as concerned members of the Yorktown community.

Scope and Contents

Howard Klee's papers document the Amoco-US Environmental Protection Agency's pollution prevention project at Amoco's refinery in Yorktown, VA. The collection includes scientific analyses and engineering reports, as well as budgets, correspondence, and the executive summaries written across the years. Included in the collection are unique data maps of the refinery, as well as a set of photographs taken between 1989-1992 that reflect the work of the field scientists, engineers, and academic participants. Roundtable discussions featuring locals affected by the refinery and potential pollution reduction are available on digital video (converted from their original VHS formats), and local Virginia news reports surrounding the project are also available digitally. Finally, the collection contains Klee's personal correspondence and handwritten notes throughout the various stages of the project.

Keywords

Petroleum refineries -- Virginia
photographs
Pollution prevention -- Virginia
Pollution -- Virginia
videotapes
Klee, Howard
United States. Environmental Protection Agency
Amoco Corporation

Description of Subordinate Components

Amoco/US EPA Pollution Prevention Project, Yorktown Refinery Project Workplan, Sept. 1990 [1 of 2]. [Executive summary, background and project goals, data collection, data analysis, project schedule, project budget, maps]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77597

Unit Date 1990-09

Mixed Materials [35007007835543] MSS 2012-04, Box 1 (box)

Amoco/US EPA Pollution Prevention Project, Yorktown Refinery Project Workplan, Sept. 1990 [2 of 2]. [Project budget, appendencies and maps, including site geology and hydrogeology, chemical protocols, sampling locations, plot plans, surface water samples, solid waste samples, groundwater and soil samples].

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77598

Mixed Materials [35007007835543] MSS 2012-04, Box 1 (box)

Correspondence: Yearly through 1990 [Presentation materials, correspondence, sampling procedures, results, statistical analyses, project outlines, and summaries]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77599

Unit Date 1990

Mixed Materials [35007007835543] MSS 2012-04, Box 1 (box)

Report of Observations: Thought Leader Interviews and Focus Groups, Yorktown Refinery Public Perception Study, Jan. 1991 [1 of 2]. [Summary, thought-leader interviews, focus groups, interview questionnaire, discussion guide, York County background, appendix]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77600

Unit Date 1991-01

Mixed Materials [35007007835543] MSS 2012-04, Box 1 (box)

Report of Observations: Thought Leader Interviews and Focus Groups, Yorktown Refinery Public Perception Study, Jan. 1991 [1 of 2]. [Phone survey data]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77601

Unit Date 1991-01

Mixed Materials [35007007835543] MSS 2012-04, Box 1 (box)

Amoco/US EPA Pollution Prevention Workshop, Mar., 25-27, 1991, Williamsburg, VA [1 of 2] [Update, handouts, presentations]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77602

Unit Date 1991-03-25 - 1991-03-27

Mixed Materials [35007007835550] MSS 2012-04, Box 2 (box)

Amoco/US EPA Pollution Prevention Workshop, Mar. 25-27, 1991, Williamsburg, VA [2 of 2] [Breakout sessions: groundwater, ranking, permitting, obstacles/incentives, practices, attendees]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77603

Unit Date 1991-03-25 - 1991-03-27

Mixed Materials [35007007835550] MSS 2012-04, Box 2 (box)

Groundwater and soil data, March 1991 [1 of 3]. [Summary (including maps and overhead projector slides), site description, study approach, results, conclusions]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77604

Unit Date 1991-03

Mixed Materials [35007007835550] MSS 2012-04, Box 2 (box)

Groundwater and soil data, March 1991 [2 of 3]. [Appendix: chemical compounds, doxins and furans, boring logs, groundwater data]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77605

Unit Date 1991-03

Mixed Materials [35007007835550] MSS 2012-04, Box 2 (box)

Groundwater and soil data, March 1991 [3 of 3]. [Appendix cont'd: soil data, surface water data, sampling plan, presentation slides, communication]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77606

Unit Date 1991-03

Mixed Materials [35007007835550] MSS 2012-04, Box 2 (box)

Surface Water Data, August 1991 [1 of 2]. [Summary, water system, sampling/analysis, results, conclusions, references, analytical information]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77607

Unit Date 1991-08

Mixed Materials [35007007835550] MSS 2012-04, Box 2 (box)

Surface Water Data, August 1991 [2 of 2]. [Analytical results, dioxins/furans data, dioxin report, communications]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77608

Unit Date 1991-08

Mixed Materials [35007007835550] MSS 2012-04, Box 2 (box)

Report of the Peer Review Committee of the Amoco/EPA Pollution Prevention Project at the Yorktown, VA Refinery, November 19, 1991 - PEER REVIEW. [Background, Meeting 1 notes, Meeting 2 notes, Meeting 3 notes]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77609

Unit Date 1991-11-19

Mixed Materials [35007007835550] MSS 2012-04, Box 2 (box)

Measurement of Fixed Gases and Hydrocarbon Emissions Rates for the Blowdown Vents at the Amoco/Yorktown Refinery, November 1991. [Introduction, technical approach, measurements and results, conclusions, references, statistical/data tables with HK notes]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77610

Unit Date 1991-11

Mixed Materials [35007007835550] MSS 2012-04, Box 2 (box)

Executive Summary [Project goals, lessons and results, references, scientific tables and figures]. Abstracts, project goals, project organization (includes staffing and budget), lessons and results (re: refinery release inventory, reducing releases, ranking alternatives, obstacles and incentives, education, communications, working relationships), recommendations, references, tables (project components and samples)

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77611

Unit Date 1991-12

Mixed Materials [35007007835568] MSS 2012-04, Box 3 (box)

Executive Summary, Dec. 1991, Updated May 1992 [Project goals, lessons and results, references, scientific tables and figures]. Abstracts, project goals, project organization (includes staffing and budget), lessons and results (re: refinery release inventory, reducing releases, ranking alternatives, obstacles and incentives, education, communications, working relationships), recommendations, references, tables (project components and samples)

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77612

Unit Date 1991-12, 1992-05

Mixed Materials [35007007835568] MSS 2012-04, Box 3 (box)

Summary of Refinery Release Inventory (Final inventory) [1 of 2]. Summary, air quality, and surface water sampling data

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77613

Unit Date 1991-1992

Mixed Materials [35007007835568] MSS 2012-04, Box 3 (box)

Summary of Refinery Release Inventory (Final inventory) [2 of 2]. Subsurface sampling, solid waste sampling, public perception study, multimedia assessment of releases, appendix (includes refiner map with all sampling locations)

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77614

Unit Date 1991-1992

Mixed Materials [35007007835568] MSS 2012-04, Box 3 (box)

Project Summary, January 1992. Project summary, refinery release inventory, options identification and analysis, ranking method and results, obstacles and incentives, references, appendices

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77615

Unit Date 1992-01

Mixed Materials [35007007835568] MSS 2012-04, Box 3 (box)

Project Summary with HK notes, January 1992. HK notes re: project summary, refinery release inventory, options identification and analysis, ranking method and results, obstacles and incentives, references, appendices

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77616

Unit Date 1992-01

Mixed Materials [35007007835568] MSS 2012-04, Box 3 (box)

Risk Analysis Draft Report, prepared February 21, 1992 by Abt Associates. [HK notes on background, data, assessment, and forthcoming executive summary.]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77617

Unit Date 1992-02-21

Mixed Materials [35007007835568] MSS 2012-04, Box 3 (box)

Air Quality Data Report, prepared by D.N. Blewitt, J.W. Keating, and J.F. John, July 30, 1992 [1 of 2]. Introduction, source sampling, ambient measures, emission inventory, accuracy of the emission inventory for BTEX

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77618

Unit Date 1992-07-30

Mixed Materials [35007007835576] MSS 2012-04, Box 4 (box)

Air Quality Data Report, prepared by D.N. Blewitt, J.W. Keating, and J.F. John, July 30, 1992 [2 of 2]. Exposure modeling, conclusions, references, appendices and tables

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77619

Unit Date 1992-07-30

Mixed Materials [35007007835576] MSS 2012-04, Box 4 (box)

Correspondence: January 1992-February 1992 [letters, report drafts, meeting notes]. Letters, report drafts, meeting notes.

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77620

Unit Date 1992-01 - 1992-02

Mixed Materials [35007007835576] MSS 2012-04, Box 4 (box)

Correspondence: February 1992-September 1992 [letters, report drafts, meeting notes, presentations] letters, report drafts, meeting notes, presentations

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77621

Unit Date 1992-02 - 1992-09

Mixed Materials [35007007835576] MSS 2012-04, Box 4 (box)

Correspondence: September 1992-December 1992 [letters, report drafts, meeting notes, presentations] letters, report drafts, meeting notes, presentations

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77622

Unit Date 1992-09 - 1992-12

Mixed Materials [35007007835576] MSS 2012-04, Box 4 (box)

Project summaries, reviews, and related correspondence [1 of 2]. Summaries, reviews, and related correspondence

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77623

Unit Date 1992-1995

Mixed Materials [35007007835576] MSS 2012-04, Box 4 (box)

Project summaries, reviews, and related correspondence [2 of 2]. Summaries, reviews, and related correspondence

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77624

Unit Date 1992-1995

Mixed Materials [35007007835576] MSS 2012-04, Box 4 (box)

Effective Environmental Strategies: Opportunities for Innovation and Flexibility Under Federal Environmental Laws [Draft written June 1993]. Executive summary, research and analysis re: Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Multimedia implications, Toxic Substance Control Act, Pollution Prevention Act of 1990, Safe Drinking Water Act

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77625

Unit Date 1993-06

Mixed Materials [35007007835584] MSS 2012-04, Box 5 (box)

Projects, Evaluations, and Rankings: Prepared for US EPA, Project Manager Dr. Mahesh Podar, July 1993 [1 of 2]. Executive summary, project criteria selection (includes Williamsburg workshop alternatives), project characterization (technical characteristics, cost factors, human health and ecological effects)

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77626

Unit Date 1993-07

Mixed Materials [35007007835584] MSS 2012-04, Box 5 (box)

Projects, Evaluations, and Rankings: Prepared for US EPA, Project Manager Dr. Mahesh Podar, July 1993 [2 of 2]. Project ranking (criterion ranking, methodology for multi-criteria ranking, development of criteria weights, results of multi-criteria ranking, conclusions), references, appendices

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77627

Unit Date 1993-07

Mixed Materials [35007007835584] MSS 2012-04, Box 5 (box)

Effective Environmental Strategies: Opportunities for Innovation and Flexibility Under Federal Environmental Laws [Official]. HK notes and markup: executive summary, research and analysis re: Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Multimedia implications, Toxic Substance Control Act, Pollution Prevention Act of 1990, Safe Drinking Water Act

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77628

Unit Date 1993

Mixed Materials [35007007835584] MSS 2012-04, Box 5 (box)

Yorktown Refinery Risk Reduction Benefits of Pollution Prevention Options. [Airborne exposure pathway analysis, waterborne exposure pathway analysis, deposition pathway analysis, conclusions and recommendations, appendices]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77629

Unit Date 1993

Mixed Materials [35007007835584] MSS 2012-04, Box 5 (box)

Correspondence and Draft Materials: Yearly Through 1993 [letters, presentations, news articles, report drafts with HK notes, and statistical analyses with HK notes] [1 of 2]. Letters, presentations, news articles, report drafts with HK notes, and statistical analyses with HK notes

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77630

Unit Date 1993

Mixed Materials [35007007835584] MSS 2012-04, Box 5 (box)

Correspondence and Draft Materials: Yearly Through 1993 [letters, presentations, news articles, report drafts with HK notes, and statistical analyses with HK notes] [2 of 2]. Letters, presentations, news articles, report drafts with HK notes, and statistical analyses with HK notes

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77631

Unit Date 1993

Mixed Materials [35007007835592] MSS 2012-04, Box 6 (box)

Amoco-EPA Pollution Prevention Project: Supplemental Report [1 of 2]. Post-project evaluation, blowdown stack emissions measurement, refinery equipment fugitive emissions, evaluation of sediment in Bull Creek and the Settling Basins

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77632

Unit Date 1994

Mixed Materials [35007007835592] MSS 2012-04, Box 6 (box)

Amoco-EPA Pollution Prevention Project: Supplemental Report [2 of 2]. Drinking water well surveys, vegetation and wildlife inventory, references, appendices and data tables

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77633

Unit Date 1994

Mixed Materials [35007007835592] MSS 2012-04, Box 6 (box)

Risk Reduction Benefits of Pollution Prevention Options. [HK notes: airborne exposure pathway analysis, waterborne exposure pathway analysis, deposition pathway analysis, conclusions and recommendations, appendices]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77634

Unit Date 1994

Mixed Materials [35007007835592] MSS 2012-04, Box 6 (box)

Correspondence and Draft Materials: Yearly Through 1994 [letters, presentations, news articles, report drafts] (2 folders). [Letters, presentations, news articles, report drafts]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77635

Unit Date 1994

Mixed Materials [35007007835592] MSS 2012-04, Box 6 (box)

Videos and Photograph Slides

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77636

Mixed Materials [35007007835600] MSS 2012-04, Box 7 (box)

An Environmental Partnership (VIDEO) (7:12 running time) [Discussion of impact of plant practices and regulation, the nature of "environmental management," and presenting Yorktown as the example for the first time EPA looks at emissions at a real factory; NTSC VHS, PAL VHS, and digitized video available]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77637

Unit Date 1990

Mixed Materials [35007007835600] MSS 2012-04, Box 7 (box)

Yorktown Watermen (VIDEO) (14:56 running time) [roundtable discussion with employees; digitized and NTSC VHS available]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77638

Unit Date 1990

Mixed Materials [35007007835600] MSS 2012-04, Box 7 (box)

Yorktown Residents (VIDEO) (16:41 running time) [roundtable discussion with Yorktown residents about the refinery, pollution, and the impact of the Amoco-EPA study; digitized and NTSC VHA available]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77639

Unit Date 1990

Mixed Materials [35007007835600] MSS 2012-04, Box 7 (box)

WVEC & WTKR Yorktown News Footage: Amoco Rising Fuel Prices & Amoco and the EPA (VIDEO) [News footage discussion Amoco-EPA study in local Yorktown news; digitized and NTSC VHS available]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77640

Unit Date 1990

Mixed Materials [35007007835600] MSS 2012-04, Box 7 (box)

Box of photograph slides. [Includes photographs of the Amoco Yorktown Refinery in Yorktown, Va., the geographic and natural spaces around the refinery, scientists sampling areas around the refinery, discussion and roundtable meetings, and graphs/documents related to the study]

Unit ID [Archival Resource Key](#)

Unit ID /repositories/4/archival_objects/77641

Unit Date 1988-1994

Mixed Materials [35007007835600] MSS 2012-04, Box 7 (box)