DOWNERS GROVE SANITARY DISTRICT GENERAL MANAGER'S REPORT July 14, 2023

July Board Meeting

Copies of documentation for the following agenda items are enclosed for the July 18, 2023 meeting:

- 1) Proposed Agenda
- 2) Minutes of the June 27, 2023 regular meeting
- 3) Claim Ordinance 1927
- 4) 2023 CSWEA Operations Award Illinois
- 5) Resolution of Appreciation Jeff Barta
- 6) Operations Report on Financial Reporting and Audit
- 7) Memo regarding Basin 2D Sewer Rehabilitation Contract Award
- 8) Renewable Energy Credits Purchase and Sale Agreement

BOLI Meeting

There is no BOLI meeting scheduled this month.

Operations Reports

Copies of the following are enclosed for July operations:

- 1) Progress Report from Carly on Administrative Services activities.
- 2) The WWTC Operations Report from Marc.
- 3) The WWTC/Lift Station Maintenance Report from Nick.
- 4) Progress Report from Bob on Collection System Maintenance activities.
- 5) Progress Report from Keith on Collection System Construction activities.
- 6) Progress Report from Reese on Laboratory activities.
- 7) Engineering Report

Infiltration/Inflow Removal Work

Inspection efforts on private property under the I/I program with the intention of conducting I/I removal are ongoing in the 2C-025 in downtown Downers Grove. A map showing progress for the 2C-025 area is included herein, as well as a status summary sheet.

Safety

The Safety Committee met on June 27th. Topics discussed included PPE, safety policies, and safety training.

All employees who perform work in the community have now completed the 4-hour flagger certification course. Based on what was learned in the class, some additional road work signs are being purchased as well as Class 3 vests and reflective leg straps.

Financial

A copy of the Investment Schedule as of June 30, 2023 is enclosed.



The Treasurer's Report for June 2023 covering the two months of FY 23-24 is included herein, along with a summary cover memo.

Meetings

I attended the following meetings since the June 23, 2023 General Manager's report:

- June 27 29 EPA Pretreatment Compliance Inspection. Reese also attended.
- June 30 attended IAWA Nutrient Subcommittee meeting
- July 6 attended IEPA Triennial Review Public Hearing
- July 7 attended IWSS monthly engagement meeting
- July 11 attended CSWEA Executive Committee meeting
- July 14 attended IAWA Technical Committee Meeting in Starved Rock

Miscellaneous

Copies of the following items are enclosed:

- 1) General Manager's Report to the Employees dated June 30 and July 14
- 2) June 2023 DGSD WWTC wastewater report of SARS-CoV-2, influenza A & B and RSV levels
- 3) DuPage River Salt Creek Workgroup Summer 2023 newsletter

cc: WDVB, AES, JMW, BOLI, DM, CS

DOWNERS GROVE SANITARY DISTRICT BOARD OF TRUSTEES MEETING JULY 18, 2023 – 7:00 PM BOARD ROOM

PROPOSED AGENDA

- I. APPROVAL OF MINUTES
 A. REGULAR MEETING JUNE 27, 2023
- II. APPROVAL OF CLAIM ORDINANCE NO. 1927
- III. PUBLIC COMMENT
- IV. OLD BUSINESS
- V. NEW BUSINESS
 - A. PRESENTATION OF CSWEA 2023 OPERATIONS AWARD ILLINOIS
 - B. RESOLUTION OF APPRECIATION JEFF BARTA
 - C. OPERATIONS REPORT FINANCIAL REPORTING AND AUDIT
 - D. CONTRACT AWARD BASIN 2D SEWER REHABILITATION
 - E. RENEWABLE ENERGY CREDITS PURCHASE AND SALE AGREEMENT

PUBLIC COMMENT:

The District has an online form for the Public who cannot attend the meeting to submit public comment. District staff shall read aloud any received public comments during the Public Comment portion of the meeting. Public comments for Public not attending the meeting in person need to be submitted before 4:00 p.m. on July 18, 2023. The form can be found here: https://www.dgsd.org/government/public-comment/



MINUTES

The monthly meeting of the Downers Grove Sanitary District Board of Trustees was held on Tuesday, June 27, 2023, convening at 7:00 p.m. The meeting was held at the District's Administration Center, 2710 Curtiss Street, Downers Grove. Present were Trustees Wally D. Van Buren, Amy E. Sejnost, Jeremy M. Wang, General Manager Amy R. Underwood, Administrative Supervisor Carly S. Shaw, and Attorney Dan McCormick. Ronald Kaminski, a resident of the District residing at 720 65th St in Downers Grove, also attended.

Minutes of Regular Meeting – May 16, 2023

A motion was made by Trustee Wang seconded by Trustee Sejnost approving the minutes of the regular meeting held on May 16, 2023 and authorizing the President and Clerk to sign same. The motion carried. (Votes recorded: Ayes–Van Buren, Sejnost, and Wang.)

Claim Ordinance No. 1926

A motion was made by Trustee Sejnost seconded by Trustee Wang adopting Claim Ordinance No. 1926 in the total amount of \$1,081,570.33 as presented and authorizing the President and Clerk to sign same. The motion carried. (Votes recorded: Ayes–Van Buren, Sejnost and Wang.)

<u>Public Comment</u> – Refer to the BURP Appeal summary for Public Comment.

New Business

2023 Tax Levy Ordinance

Administrative Supervisor Shaw presented the proposed Levy Ordinance for Fiscal Year 23-24 in the amount of \$1,501,578 for sanitary sewer repairs and replacements and repayments of loans under the American Recovery and Reinvestment Act of 2009 / Illinois Environmental Protection Agency's Water Pollution Control Loan Program. This levy will be reflected in real estate tax bills due in 2023. A motion was made by Trustee Wang seconded by Trustee Sejnost adopting the Levy Ordinance for Fiscal Year 2023-2024 in the amount of \$1,501,578 for sanitary sewer repairs and replacements and repayments of loans under the American Recovery and Reinvestment Act of 2009 / Illinois Environmental Protection Agency's Water Pollution Control Loan Program and authorizing the President and Clerk to sign same, adopting the Certificate of Levy and authorizing the Clerk to sign same, and authorizing Assistant Clerk Shaw to sign the Certificate of Inapplicability. The motion carried. (Votes recorded: Ayes-Van Buren, Sejnost and Wang.)

Administrative Supervisor Shaw presented a memo reviewing the calculation and application of the Levy Ordinance for Fiscal Year 2022-2023 reflected in real estate tax bills paid in 2022. This item was for informational purposes only.

BURP Program Limit Amendment Ordinance 23-03

Staff presented Ordinance No. 23-03 amending the limits of the Backup Reimbursement Program (BURP), increasing it from \$2,500 to \$3,500. A motion was made by Trustee Sejnost seconded by Trustee Wang approving Ordinance 23-03 as presented and authorizing the Clerk and President to sign the same. The motion carried. (Votes recorded: Ayes–Van Buren, Sejnost and Wang.)

BURP Appeal 720 65th St. Downers Grove

Administrative Supervisor Shaw presented an appeal to the BURP limits from a resident at 720 65th St. in Downers Grove. Ronald Kaminski, owner of the property, was in attendance and appealed against the \$2,500 limit requesting reimbursement in full for expenses from damage incurred from a backup due to a mainline blockage in his basement totaling \$6,530.12. The recommendation of staff was to reimburse Mr. Kaminski the \$3,500 limit approved by the Board under Ordinance No. 23-03. A motion was made by Trustee Wang seconded by Trustee Sejnost approving reimbursement of \$3,500 as presented. The motion carried. (Votes recorded: Ayes–Van Buren, Sejnost and Wang.)

2023 Painting Services Contract Award

General Manager Underwood reviewed the bid opening on June 14 for the 2023 Painting Services project. Work includes protective coatings on Secondary Clarifier 7 and Intermediate Clarifier 3, painting the grit building basement, a portion of the tunnels, and equipment and piping at the Wroble and College Lift Stations. Three bids were received for this project. Staff recommends that the District award the project to the lowest responsive, responsible bidder, G.P. Maintenance Services, Inc. of Palos Hills, Illinois, in the amount of \$159,500. A motion was made by Trustee Sejnost seconded by Trustee Wang awarding the contract for the 2023 Painting Services to the lowest responsive, responsible bidder, G.P. Maintenance Services, Inc. in the amount of \$159,500 and authorizing the General Manager and Assistant Clerk to sign the same. The motion carried. (Votes recorded: Ayes–Van Buren, Sejnost and Wang.)

Other New Business

Trustee Sejnost noted the CHP electricity generated in the month of May and inquired about the status of the CHP 2 repairs. She commented on the driveway replacement at Venard Lift Station. She noted Nick Whitefleet's attendance of the OSHA 30-hour training. She also made mention of Jeff Barta's upcoming retirement. She also inquired about any protective measures for staff in dealing with the smoke pollution that is currently happening and requested they stay indoors as much as possible.

Trustee Wang noted the decrease in COVID detected in the District's wastewater.

Trustee Van Buren commented on the delay of the piping for the Outfall project. He also noted Jeff Barta's upcoming retirement. He noted the savings on the sidewalk replacements at the WWTC. He also inquired on the violation of the swimming pool that was drained into our sewer lines.

Approved: July 18, 2023		
	President	
Attest:		

A motion was made by Trustee Sejnost seconded by Trustee Wang to adjourn the regular meeting at 7:32 p.m. The motion carried.

Downers Grove, Illinois

Date: July 18, 2023

Claim Ordinance No. 1927

An Ordinance Providing for the Payment of Certain Claims.

WHEREAS, it appears to the Board of Trustees of the Downers Grove Sanitary District that there are certain claims against said District which would be allowed and paid therefore,

BE IT ORDAINED, by the Board of Trustees of the Downers Grove Sanitary District

That the following claims be and they are hereby approved and ordered paid and that an order be drawn on the Treasurer of said District out of the funds shown below. Said claims, totaling \$1,295,694.77 being in words and figures as follows:

DATE 06/16/23

PERIOD END 06/15/23 PAGE 4

PAYROLL END DATE: 06.15.23 PAYROLL PAID DATE: 06.20.23 G/L DATE: 07.31.23

G/L NUMBER		DEBIT	CREDIT
	CASH - PAYROLL ACCOUNT		24587.12-
01-00.2000	FEDERAL TAX WITHHELD		4530.77-
01-00.2001	STATE TAX WITHHELD		1782.07-
01-00.2002	SOCIAL SECURITY WITHHELD		2902.66-
01-00.2003	IMRF WITHHELD		1707.45-
01-00.2014	VOLUNTARY ADDITIONAL PENSION CONTRIBUTION		1852.66-
01-00.2017	VOLUNTARY GROUP LIFE		64.00-
01-00.2021	FLEXIBLE ACCOUNT WITHHELD - MEDICAL		283.33-
01-00.2024	FLEXIBLE ACCOUNT WITHHELD - PREM CONVERSION		498.35-
01-00.2025	EMPLOYEE INS PREM CONTRIBUTION - POST TAX		152.16-
01-00.2026	DEFERRED COMPENSATION WITHHELD - IPPFA		125.04-
01-00.2027	DEFERRED COMPENSATION WITHHELD - IPPFA ROTH		40.00-
01-00.2028	DC PLAN LOAN REPAYMENT WITHHELD		77.06-
01-11.A003	GENERAL MANAGEMENT	9293.12	
01-11.A004	FINANCIAL RECORDS	571.87	
01-11.A007	CODE ENFORCEMENT	9722.25	
01-11.A030	BUILDING AND GROUNDS	309.95	
01-12.A006	ENGINEERING	87.57	
01-12.A009	OPERATIONS MANAGEMENT	4093.38	
01-12.A011	MAINTENANCE - WWTC	6972.18	
01-12.A014	MAINTENANCE - ELECTRICAL	279.22	
01-12.A021	WWTC - OPERATIONS	612.45	
01-12.A023	WWTC - ENERGY RECOVERY	278.34	
01-13.A009	OPERATIONS MANAGEMENT	1758.54	
01-13.A042	LAB - PRETREATMENT	4499.56	
01-15.A009	OPERATIONS MANAGEMENT	124.24	

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DATE 06/27/23

PERIOD END 06/24/23 PAGE

PAYROLL END DATE: 06.24.23 PAYROLL PAID DATE: 06.30.23 G/L DATE: 07.31.23

G/L NUMBER	COST DESCRIPTION	DEBIT	CREDIT
01-00.1001	CASH - PAYROLL ACCOUNT		56641.15-
01-00.2000	FEDERAL TAX WITHHELD		9261.38-
01-00.2001	STATE TAX WITHHELD		4060.39-
01-00.2002	SOCIAL SECURITY WITHHELD		6787.07-
01-00.2003	IMRF WITHHELD		4098.21-
01-00.2005	CLEARING		20.89-
01-00.2013	CREDIT UNION WITHHELD		2494.00-
01-00.2014	VOLUNTARY ADDITIONAL PENSION CONTRIBUTION		4240.99-
01-00.2021	FLEXIBLE ACCOUNT WITHHELD - MEDICAL		305.00-
01-00.2022	FLEXIBLE ACCOUNT WITHHELD - DEPENDENT CARE		192.31-
01-00.2024	FLEXIBLE ACCOUNT WITHHELD - PREM CONVERSION		1362.85-
01-00.2025	EMPLOYEE INS PREM CONTRIBUTION - POST TAX		246.84-
01-00.2026	DEFERRED COMPENSATION WITHHELD - IPPFA		473.13-
01-00.2027	DEFERRED COMPENSATION WITHHELD - IPPFA ROTH		200.00-
01-00.2028	DC PLAN LOAN REPAYMENT WITHHELD		195.91-
01-11.A003	GENERAL MANAGEMENT	106.55	
01-11.A004	FINANCIAL RECORDS	8408.29	
01-11.A005	ADMINISTRATIVE RECORDS	1319.41	
01-11.A007	CODE ENFORCEMENT	6433.33	
01-11.A008	SAFETY ACTIVITIES	1679.98	
01-12.A011	MAINTENANCE - WWTC	13912.63	
01-12.A014	MAINTENANCE - ELECTRICAL	8072.73	
01-12.A021	WWTC - OPERATIONS	14621.31	
01-12.A022	WWTC - SLUDGE HANDLING	7747.84	
01-12.A023	WWTC - ENERGY RECOVERY	228.79	
01-12.A030	BUILDING AND GROUNDS	3262.09	
01-13.A041	LAB - WWTC	5313.11	
01-13.A048	LAB - ENERGY RECOVERY	94.86	
01-14.A051	SEWER MAINTENANCE	12228.59	
01-14.A054	SEWER MAINTENANCE - BACKUPS AND HIGH FLOWS	514.32	
01-14.A062	INSPECTION - CONSTRUCTION OF DGSD PROJECTS	2870.68	
01-14.A063	INSPECTION - PERMIT INSPECTIONS	529.25	
01-14.A064	INSPECTION - MISCELLANEOUS	658.19	
01-14.A065	INSPECTION - CONSTR BY VILLAGES, UTILITIES	912.54	
01-14.A066	INSPECTION - CODE ENFORCEMENT	1336.56	
01-15.A080	LIFT STATION MAINTENANCE	329.07	

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DATE 07/03/23 PERIOD END 06/30/23 PAGE 4

G/L NUMBER COST DESCRIPTION DEBIT CREDIT ______ 01-00.1001 CASH - PAYROLL ACCOUNT 24589.80-01-00.2000 FEDERAL TAX WITHHELD 4529.45-01-00.2001 STATE TAX WITHHELD 1781.65-01-00.2002 SOCIAL SECURITY WITHHELD 2901.96-01-00.2003 IMRF WITHHELD 1707.04-01-00.2014 VOLUNTARY ADDITIONAL PENSION CONTRIBUTION 1852.94-01-00.2017 VOLUNTARY GROUP LIFE 64.00-01-00.2021 FLEXIBLE ACCOUNT WITHHELD - MEDICAL 283.33-01-00.2024 FLEXIBLE ACCOUNT WITHHELD - PREM CONVERSION 498.35-01-00.2025 EMPLOYEE INS PREM CONTRIBUTION - POST TAX 152.16-01-00.2026 DEFERRED COMPENSATION WITHHELD - IPPFA 124.96-01-00.2027 DEFERRED COMPENSATION WITHHELD - IPPFA ROTH 40.00-01-00.2028 DC PLAN LOAN REPAYMENT WITHHELD 77.06-01-11.A003 GENERAL MANAGEMENT 8082.37 01-11.A004 FINANCIAL RECORDS 42.00 01-11.A006 ENGINEERING 168.88 01-11.A007 CODE ENFORCEMENT 9722.25 01-11.A030 BUILDING AND GROUNDS 154.98 01-12.A006 ENGINEERING 167.99 01-12.A009 OPERATIONS MANAGEMENT 4827.00 01-12.A011 MAINTENANCE - WWTC 7251.40 01-12.A014 MAINTENANCE - ELECTRICAL 62.12 01-12.A021 368.05 WWTC - OPERATIONS 01-12.A030 BUILDING AND GROUNDS 92.86 01-13.A009 OPERATIONS MANAGEMENT 919.65 LAB - WWTC 01-13.A041 53.84 01-13.A042 LAB - PRETREATMENT 5963.83 01-13.A048 LAB - ENERGY RECOVERY 54.39 546.85 01-14.A006 ENGINEERING 01-15.A009 OPERATIONS MANAGEMENT 124.24

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Payroll Ending Date: 06/30/23

Payroll Paid Date: 07/05/23

07/31/23

GL Date:

DATE 07/12/23

PERIOD END 07/08/23 PAGE 5

PAYROLL END DATE: 07.08.23 PAYROLL PAID DATE: 07.14.23 G/L DATE: 07.31.23

G/L NUMBER	COST DESCRIPTION	DEBIT	CREDIT
01-00.1001	CASH - PAYROLL ACCOUNT		60949.99-
01-00.2000	FEDERAL TAX WITHHELD		10115.00-
01-00.2001	STATE TAX WITHHELD		4373.72-
01-00.2002	SOCIAL SECURITY WITHHELD		7282.81-
01-00.2003	IMRF WITHHELD		4256.55-
01-00.2005	CLEARING		20.89-
01-00.2013	CREDIT UNION WITHHELD		2494.00-
01-00.2014	VOLUNTARY ADDITIONAL PENSION CONTRIBUTION		4344.82-
01-00.2017	VOLUNTARY GROUP LIFE		192.00-
01-00.2021	FLEXIBLE ACCOUNT WITHHELD - MEDICAL		305.00-
01-00.2022	FLEXIBLE ACCOUNT WITHHELD - DEPENDENT CARE		192.31-
01-00.2024	FLEXIBLE ACCOUNT WITHHELD - PREM CONVERSION		1299.86-
01-00.2025	EMPLOYEE INS PREM CONTRIBUTION - POST TAX		308.84-
01-00.2026	DEFERRED COMPENSATION WITHHELD - IPPFA		465.72-
01-00.2027	DEFERRED COMPENSATION WITHHELD - IPPFA ROTH		200.00-
01-00.2028	DC PLAN LOAN REPAYMENT WITHHELD		195.91-
01-11.A003	GENERAL MANAGEMENT	610.01	
01-11.A004	FINANCIAL RECORDS	8256.38	
01-11.A005	ADMINISTRATIVE RECORDS	1299.59	
01-11.A007	CODE ENFORCEMENT	5140.60	
01-11.A008	SAFETY ACTIVITIES	1445.30	
01-12.A011	MAINTENANCE - WWTC	16307.36	
01-12.A014	MAINTENANCE - ELECTRICAL	8249.50	
01-12.A021	WWTC - OPERATIONS	19371.83	
01-12.A022	WWTC - SLUDGE HANDLING	5604.44	
01-12.A023	WWTC - ENERGY RECOVERY	178.77	
01-12.A030	BUILDING AND GROUNDS	756.02	
01-13.A041	LAB - WWTC	5838.20	
01-13.A048	LAB - ENERGY RECOVERY	139.86	
01-14.A051	SEWER MAINTENANCE	11459.78	
01-14.A054	SEWER MAINTENANCE - BACKUPS AND HIGH FLOWS	299.89	
01-14.A061	INSPECTION - NEW CONSTRUCTION	443.13	
01-14.A062	INSPECTION - CONSTRUCTION OF DGSD PROJECTS	2113.34	
01-14.A063	INSPECTION - PERMIT INSPECTIONS	90.66	
01-14.A064	INSPECTION - MISCELLANEOUS	1849.91	
01-14.A065	INSPECTION - CONSTR BY VILLAGES, UTILITIES	598.35	
01-14.A066	INSPECTION - CODE ENFORCEMENT	3531.52	
01-14.A072	SEWER INVESTIGATIONS	79.78	
01-15.A030	BUILDING AND GROUNDS	3103.20	
01-15.A080	LIFT STATION MAINTENANCE	230.00	

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V7. V7				a /	BURBUIGH DECCES		ATTE	ATT
NAME	NUMBER	DATE	NUMBER	G/L NUMBER	EXPENSE DESCRIPTION	EXPENSE	CHECK AMT	CHECK NO
ADVOCATE OCCUPATIONAL HEALTH	A000150	05/04/23	844963	01-14.B117	DRUG TEST	34.00	34.00	064299
ALEXANDER CHEMICAL CORPORATION	A000200	07/05/23	69620	01-12.B404	SODA ASH	1165.25	1165.25	104939
ALTORFER INDUSTRIES, INC.	A000292	06/29/23	P6AC0075433	01-12.B501	CAT HYDRAULIC OIL	59.92		
		06/29/23	P6AC0075434	01-12.B501	CAT HYDRAULIC OIL	59.92		
		06/20/23	PM6A0017957	01-12.B513	EMER GEN #1 ANNUAL PM	174.00		
		06/20/23	PM6A0017958	01-12.B513	EMER GEN #3 ANNUAL PM	174.00		
		06/20/23	PM6A0017959	01-12.B513	EMER GEN #2 ANNUAL PM	174.00	641.84	104940
Amazon Business	A000296	06/27/23	139MPT7P34T1	01-14.B115	HDMI ADAPTER	39.89		
		06/27/23	139MPT7P34T1	01-14.B116	LENS WIPES	11.99		
		06/29/23	1CPTWKCTCTPF	01-11.B112	HEADSETS	425.88		
		07/06/23	1D19FC3VJQVF	01-12.B117	RF BOOTS	289.05		
		07/07/23	1GN6TWCDN7LF	01-12.B116	LABEL MAKER	39.99		
		06/30/23	1GQPDKKRJHL7	01-12.B509	LAUNDRY DETERGENT	83.16		
		06/30/23	1K19HKLMJP7F	01-13.B116	PAPER TOWELS	68.97		
		06/16/23	1QWTMWVJ7D1V	01-11.B112	CREDIT	413.97-		
		06/14/23	1YMFY3HYCNKL	01-11.B112	ADMIN HEADSETS	413.97		
		06/21/23	1YV1FN6F4DAV	01-13.B116	LAB SUPPLIES	448.66		
		06/22/23	1YWHVMJP3YG7	01-13.B116	STANDARD METHODS	275.67	1683.26	104941
NALYTICAL SOLUTIONS, INC.	A000381	06/25/23	12005659	01-12.B510	GAS SAMPLING	1470.00	1470.00	064337
AUTOZONE - AZ COMMERCIAL	A000600	06/20/23	2576351274	01-12.B510	VEHICLE SUPPLIES	25.99		
		06/20/23	2576351278	01-12.B501	VEHICLE SUPPLIES	58.97		
		06/20/23	2576351300	01-12.B501	VEHCILE SUPPLIES	39.98		
		07/05/23	2576362063	01-11.C225	AUTO PARTS	43.18		
		07/06/23	2576362551	01-12.B116	GREASE TUBES	79.08	247.20	064300
BradyIFS	в000319	06/21/23	8124511	01-12.B116	MSB SUPPLIES	92.20	92.20	104942
CINTAS #344	C000300	06/20/23	4159131134	01-12.B117	WWTC UNIFORMS	90.71		
		06/20/23	4159131134	01-14.B117	SS UNIFORMS	42.00		
		06/27/23	4159829657	01-12.B117	WWTC UNIFORMS	90.71		
		06/27/23	4159829657	01-14.B117	SS UNIFORMS	42.00		
		07/11/23	4161230106	01-12.B117	WWTC UNIFORMS	90.71		
		07/11/23	4161230106	01-14.B117	SS UNIFORMS	42.00	398.13	064301
CINTAS FIRST AID & SAFETY	C000320	06/28/23	5164578596	01-11.B113	FIRST AID REPLENISH	319.87	319.87	064302
CITY INSIGHT	C000325	06/21/23	1061	01-11.B115	BILL PORTAL INTEGRATION	8250.00	8250.00	104943
COMCAST	C000373	07/03/23	877120120055	01-11.B112	BACK UP INTERNET	144.85	144.85	064303
Comcast	C000375	07/01/23	177137985	01-11.B112	INTERNET SERVICE	830.00	830.00	064304
COMED	C000380	06/20/23	0562080004	01-15.B100	VENARD LS ELECTRIC	342.15		
		06/16/23	1095091170	01-15.B100	NW LS ELECTRIC	958.12		
		07/03/23	1108062005	01-11.B100	ADMIN ELECTRIC JUNE	236.85		
		07/03/23	1108062005	01-12.B100	PLANT ELECTRIC JUNE	7950.30		
		06/30/23	1108062005 2	01-11.B100	ADMIN ELECTRIC MAY	110.08		
		06/30/23	1108062005 2		PLANT ELECTRIC MAY	2309.10		
			6770572011		WALNUT HSE ELECTRIC	84.75		
			6770572011		BSSRAP ELECTRIC	54.73		
			8762083052		BIG TOP ELECTRIC	23.44	12069.52	064305
CONCENTRIC INTEGRATION, LLC	C000410	06/19/23			COMPUTERS & IT	6808.18		
			0247474		AUTOMATION SUPP SVCS	285.00	7093.18	104944

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NAME	NUMBER	DATE	NUMBER	G/L NUMBER	EXPENSE DESCRIPTION	EXPENSE	CHECK AMT	CHECK NO
COVERALL NORTH AMERICA, INC	C000557	07/01/23	1010716177	01-12.B812	MSB CLEANING	304.00		
		07/01/23	1010716177	01-13.B116	LAB CLEANING	157.00		
		07/01/23	1010716178	01-11.B118	ADMIN CLEANING	429.00	890.00	104945
CUMMINS, INC.	C000650	06/23/23	F28267	01-15.B529	350KW PORT GEN PART	15.40	15.40	064306
CURTIS MARTIN GROUP, INC.	C000660	06/23/23	8755	01-11.B115	BILL ISSUE/CTY INS UPDATE	600.00		
		06/23/23	8756	01-11.B115	BILL ISSUE/CTY INS UPDATE	1500.00	2100.00	104946
DANIEL MCCORMICK, P. C.	D000035	06/30/23	002	01-11.B124	LEGAL SERVICES	450.00	450.00	064307
DELTA SONIC	D000220	06/30/23	INV0007237	01-11.C225	ADMIN CAR WASHES	16.66		
		06/30/23	INV0007237	01-12.C225	WWTC CAR WASHES	24.99		
		06/30/23	INV0007237	01-14.C225	SS CAR WASHES	58.31	99.96	064308
VILLAGE OF DOWNERS GROVE	D000480	07/01/23	103374	01-12.B102	PLANT WATER	3315.40		
		07/01/23	103375	01-11.B102	ADMIN CTR WATER	92.66		
		06/22/23	8509	01-11.B121	METER READINGS	475.31		
		07/10/23	8568	01-11.C222	ADMIN FUEL	102.84		
		07/10/23	8568	01-12.C222	WWTC FUEL	1290.86		
		07/10/23	8568	01-13.C222	LAB FUEL	9.88		
		07/10/23	8568	01-14.C222	SS FUEL	1271.79	6558.74	064309
EBIX, INC	E000002	07/05/23	634938	01-11.B137	TOP HEALTH	134.40	134.40	064338
XODUS TECHNOLOGY SERVICE	E000480	06/23/23	23151	01-11.B115	AMY LAPTOP BATTERY	127.49		
		06/23/23	23151	01-11.B124	IT SERVICES	2422.50	2549.99	064310
EYE MED VISION CARE	E000600	06/30/23	165842222	01-17.E455	VISION INSURANCE	422.07	422.07	064311
FEDEX KINKO'S	F000075	07/01/23	361300002500	01-13.B116	BINDER COVERS	7.49	7.49	064312
FirstComm	F000136	07/06/23	125566512	01-11.B112	ADMIN PHONE SERVICE	269.14		
		07/06/23	125566512	01-12.B112	WWTC PHONE SERVICE	390.33		
		07/06/23	125566512	01-13.B112	LAB PHONE SERVICE	65.19		
		07/06/23	125566512	01-14.B112	SS PHONE SERVICE	203.57	928.23	064339
FIRST ENVIRONMENTAL LAB	F000140	06/22/23	176395	01-13.B123	ARROW GEAR IWS SAMPLING	201.60		
		06/23/23	176444	01-13.B123	MONTHLY NPDES	117.60	319.20	104947
GEORGE'S LANDSCAPING	G000260	07/13/23	JUNE 2023	01-11.B118	ADMIN CTR MOWING	562.10		
		07/13/23	JUNE 2023	01-12.B812	WWTC MOWING	4047.50		
		07/13/23	JUNE 2023	01-15.B820	BUTTERFIELD LS MOWING	185.25		
		07/13/23	JUNE 2023	01-15.B821	CENTEX LS MOWING	185.25		
			JUNE 2023		EARLSTON LS MOWING	185.25		
			JUNE 2023		HOBSON LS MOWING	185.25		
			JUNE 2023		LIBERTY PARK MOWING	185.25		
			JUNE 2023		NORTHWEST LS MOWING	185.25		
			JUNE 2023		VENARD LS MOWING	185.25		
			JUNE 2023		WROBLE LS MOWING	185.25		
			JUNE 2023		LS MISC SERVICES	372.80	6464.40	104948
W. W. GRAINGER, INC.	G000520		9747083781	01-13.B116		829.80	0.101.10	101010
ORTHODIC, INC.	5500320		9747063761			44.43		
			9747558624			77.07		
					SEE SHEET	10.50		
		06/22/22						
			9748953842					
		06/23/23	9750220882 9750352016	01-12.C225	SEE SHEET	9.24		

TAME				G / I	EVDENCE DECORTORION	HADDAGE	annar me	CHECK NO.
NAME	NUMBER	DATE	NUMBER	G/L NUMBER	EXPENSE DESCRIPTION	EXPENSE	CHECK AMT	CHECK NO
		06/26/23	9752764853	01-12.B812	SEE SHEET	32.98		
		06/27/23	9752777160	01-12.B812	SEE SHEET	4.25-		
		06/27/23	9753773408	01-12.B508	SEE SHEET	205.03		
		06/28/23	9755158624	01-12.B113	SEE SHEET	165.30		
		06/28/23	9755158632	01-12.B511	SEE SHEET	22.68		
		06/29/23	9756511086	01-12.B512	SEE SHEET	399.85		
		06/30/23	9757651873	01-12.B512	SEE SHEET	131.68		
		07/03/23	9758978952	01-12.B812	SEE SHEET	32.98-		
		07/05/23	9759569628	01-12.B512	SEE SHEET	90.46		
		07/05/23	9759906770	01-15.B113	SEE SHEET	12.89		
		07/05/23	9759906796	01-15.B525	SEE SHEET	35.28		
		07/05/23	9759906812	01-12.B116	SEE SHEET	20.34		
		07/06/23	9761463380	01-12.B508	SEE SHEET	13.53		
		07/06/26	9761463398	01-12.B508	SEE SHEET	183.26		
		07/11/23	9765641619	01-12.B508	SEE SHEET	183.26-	2338.53	104949
HACH COMPANY	H000040	06/27/23	13634972	01-14.B115	USB CABLE ASSEMBLY	214.00	214.00	104950
HARBOR FREIGHT TOOLS	н000060	06/22/23	999027314362	01-11.B115	ADMIN CTR GENERATOR PARTS	122.93	122.93	064313
HOME DEPOT	H000400	06/21/23	0020551	01-14.B115	SEE SHEET	142.94		
		06/30/23	1021290	01-12.B812	SEE SHEET	129.36		
		06/20/23	1022838	01-11.B118	SEE SHEET	59.84		
		06/20/23	1022838	01-12.B512	SEE SHEET	83.62		
		07/10/23	1621722	01-12.B812	SEE SHEET	121.70		
		06/28/23	3023797	01-12.B512	SEE SHEET	29.93		
		07/07/23	4021872	01-12.B812	SEE SHEET	26.34		
		06/27/23	4620175	01-14.B116	SEE SHEET	65.78		
		06/26/23	5010185	01-12.B812	SEE SHEET	319.32		
		06/26/23	5055435	01-14.B116	SEE SHEET	29.94		
		07/05/23	6194974	01-12.B116	SEE SHEET	22.49-		
		07/03/23	8021591	01-12.B812	SEE SHEET	90.72		
		07/03/23	8160974	01-12.B812	SEE SHEET	20.98-	1056.02	064314
IDEA MARKETING GROUP	I000030	07/01/23	R15324	01-11.B115	MONTHLY WEBSITE HOSTING	95.00	95.00	064315
ITR SYSTEMS	I000060	07/10/23	106115	01-11.B115	ADMIN BLDG CARD READERS	2399.00	2399.00	064316
ILLINOIS EPA	I000270	06/29/30	IL0028380 A	01-12.B130	ANNUAL NPDES FEE	52500.00		
		06/30/23	ILR006245 A	01-12.B130	ANN STORMWTR PERMIT FEE	500.00	53000.00	064317
INFOSEND, INC.	I000415	06/30/23	242113	01-11.B121	MAILING SERVICES	5197.69	5197.69	104951
INTERSTATE BATTERY SYSTEM	I000680	07/11/23	333348	01-12.B513	CHP 2 PART	418.00	418.00	064318
J.J. Keller & Associates, Inc.	J000011	06/21/23	9108138672	01-12.B117	AG CDL ONLINE TRAINING	250.00	250.00	064340
JSN Contractors Supply	J000027	06/25/23	86416	01-14.B116	GREEN MARKING PAINT	287.28		
		06/28/23	86429	01-14.B116	GREEN MARKING PAINT	191.52	478.80	064319
John Crane Inc.	J000120	05/17/23	23A094904	01-12.B505	EXC RAW SEW PUMP 8 SEAL	5086.00		
		06/27/23	23A108057	01-12.B509	BLT PRESS PMP 2 SEAL	5680.40	10766.40	064320
KANSAS CITY LIFE INSURANCE CO	K000045	07/01/23	1568967	01-17.E455	LIFE INSURANCE	416.26	416.26	104952
LAI, LTD	L000012	06/30/23	2320195	01-12.B510	DIG 1 MIX SYS ACTUATOR	5625.00	5625.00	104953
LIBERTY PROCESS EQUIPMENT, INC.	L000028	07/10/23	0098438IN	01-12.B509	BLT PRESS PMP 2 PARTS	6207.00	6207.00	104954
LAUTERBACH & AMEN, LLP	L000070	06/16/23	79319	01-11.B124	ANNUAL AUDIT SERVICES	12900.00		
		06/23/23	79352	01-11.B124	ACTUARIAL REPORT	2930.00	15830.00	104955

NAME	NUMBER	DATE	NUMBER	G/I NIMBED	EXPENSE DESCRIPTION	EXPENSE	CHECK AMT	CHECK NO
WAPIE	NONDER	DATE	NOMBER	G/E NOMBER	EAFENGE DESCRIPTION	EXFENSE	CHECK AND	CHECK IV
MCCROMETER INC.	M000337	07/07/23	55123	01-14.B115	USB CABLE ASSEMBLY	250.22	250.22	064341
MCHENRY COUNTY COLLEGE	M000348	07/03/23	466	01-11.B113	FLAGGER TRAINING	1050.00	1050.00	064342
MCMASTER-CARR SUPPLY COMPANY	M000360	06/27/23	10165516	01-12.B505	RAG DUMPSTER RPLCMNT PART	156.36		
		06/29/23	10314792	01-15.B826	NW LS SIGN POSTS	175.78		
		06/29/23	10332297	01-14.B115	VAC-CON PARTS	23.87		
		07/07/23	10632823	01-14.C225	VAC-CON PARTS	204.72		
		06/20/23	99770196	01-12.B510	DIG 4 CLEANING SUPPLIES	90.06		
		06/22/23	99941094	01-15.B529	BOLT CLAMP	26.63		
		06/23/23	99966525	01-12.B507	RETURN/CREDIT	83.84-		
		06/23/23	99992566	01-12.B507	SEC 7 STAIRS	656.90	1250.48	104956
METROPOLITAN INDUSTRIES, INC.	M000500	06/26/23	INV051680	01-12.B507	RAS PUMP 3 GASKET	289.37	289.37	104957
MICRO CENTER	M000550	06/26/23	6102438	01-12.B513	SCADA/VILL HALL PLC UPS	59.99	59.99	104958
MIDAMERICAN ENERGY SERVICES,	LLM000554	06/20/23	259824	01-15.B100	NORTHWEST LS ELECTRIC	409.85		
		06/23/23	259829	01-15.B100	VENARD LS ELECTRIC	223.10	632.95	104959
NCPERS GROUP LIFE INSURANCE	N000010	07/01/23	3266082023	01-00.2017	VOL LIFE INSURANCE	256.00	256.00	104960
NAPCO STEEL, INC.	N000050	06/29/23	467133	01-12.B511	CLAR 3 RAIL/GRATE REPLACE	222.00	222.00	104961
NORTHERN ILLINOIS UNIVERSITY	N000556	07/13/23	00671921	01-11.B113	JG OSHA TRAINING	775.00	775.00	064343
PACKEY WEBB FORD	P000020	06/16/23	C38914	01-14.C225	SS VEHICLE REPAIRS	4059.90	4059.90	104962
PEERLESS NETWORK, INC	P000175	06/15/23	25822	01-11.B112	ADMIN PHN SERVICE	176.54		
		06/15/23	25822	01-12.B112	PLANT PHN SERVICE	411.94	588.48	104963
PETTY CASH	P000350	07/13/23	CASH BOX	01-11.B113	AU SAFETY GLASSES	12.98		
		07/13/23	CASH BOX	01-11.B117	SUPS LUNCH	124.88		
		07/13/23	CASH BOX	01-11.B119	POSTAGE	2.32	140.18	064321
PHENOVA	P000360	07/03/23	195391	01-13.B114	LAB SUPPLIES	128.90	128.90	104964
POLYDYNE INC.	P000395	06/30/23	1751805	01-12.B402	BELT PRESS POLYMER	3074.04	3074.04	104965
PORTABLE JOHN, INC	P000410	06/21/23	275427	01-12.B812	PORTABLE JOHN RENTAL	173.89	173.89	104966
PROFINISH	P000690	06/30/23	215085	01-12.B810	GREASE REMOVER	194.08	194.08	064322
RAPTOR TECH INC.	R000105	07/05/23	13085	01-12.B506	DRIVE HUB MACHINING	833.00	833.00	104967
RENTALMAX ADMINISTRATION	R000250	07/13/23	6006845	01-12.B116	FORKLIFT FUEL	33.69	33.69	064344
Republic Services #551	R000264	06/15/23	055101569619	01-12.B102	RECYCLING	845.55	845.55	064323
S. Schroeder Trucking, Inc.	S000059	06/16/23	202720	01-12.B509	SAND	1141.05		
		06/20/23	25249	01-12.B509	SAND	584.68	1725.73	064345
SELECTIVE INSURANCE COMPANY	S000210	07/13/23	417147515	01-17.E452	WC AUDIT ADJ	4140.00	4140.00	064324
CARLY SHAW	S000305	07/13/23	REIMBURSE	01-11.B115	EMAIL BLAST BILL PORTAL	175.00	175.00	104968
SHERWIN-WILLIAMS CO.	S000320	07/03/23	62586	01-12.B812	MSB LUNCHROOM PAINT	152.90		
		07/10/23	65967	01-12.B812	MSB LNCHRM PAINT SUPPLIES	17.71	170.61	104969
SIGNS NOW	S000390	06/23/23	SN19561673	01-15.B826	NW LS SIGNS	366.00	366.00	064325
SOUND INCORPORATED	S000480	06/29/23	73571	01-11.B115	ADM CTR SECURITY CAMERAS	2870.00	2870.00	104970
STENSTROM PETROLEUM	S000670	11/14/22	206951	01-12.B513	FREIGHT	12.76	12.76	064326
STEPHENS PLUMBING AND	S000680	06/14/23	260086	01-11.B118	TESTED RPZ DEVICE	240.00		
		06/14/23	260086	01-12.B512	TESTED RPZ DEVICE	470.00		
		06/21/23	260458	01-14.B910	SHEAR REPAIR	474.60		
		06/30/23	260725	01-14.B910	SHEAR REPAIR	568.30	1752.90	064327
STEVENSON CRANE SERVICE, INC.	S000720	06/20/23	267908	01-12.B404	H2S MEDIA CHANGE	1272.00	1272.00	104971
STEWART SPREADING, INC.	S000780	06/23/23	3359	01-12.B510	DIG 4 CLEANING	150922.45	150922.45	064328
SUBURBAN DOOR CHECK & LOCK	S000850	06/22/23	IN559768	01-11 B118	ADM CTR FRT DR ELEC STRK	162.00		



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NAME	NUMBER	DATE	NUMBER	G/L NUMBER	EXPENSE DESCRIPTION	EXPENSE	CHECK AMT	CHECK NO
		06/29/23	IN559894	01-11.B118	ADM CTR BR/LOB ELC STRK	259.20		
		06/29/23	IN559894	01-12.B812	KEYS	19.00	440.20	104972
SUBURBAN LIFE PUBLICATIONS	S000867	06/30/23	10071278	01-11.B124	LEGAL NOTICE	173.26	173.26	064329
TERRACE SUPPLY COMPANY	T000250	06/30/23	0001049500	01-12.B404	CYLINDER RENTAL	49.78		
		06/23/23	0071014599	01-12.B116	CYLINDER RENTAL	93.03		
		07/11/23	0071015945	01-12.B116	CYLINDER RENTAL	146.42	289.23	104973
TRIAD TECHNOLOGIES, LLC	T000575	07/05/23	61768124	01-14.B116	VAC-CON PART	9.83	9.83	064346
USABLUEBOOK	U000150	06/21/23	00051954	01-13.B123	REPLACE SWING ARM	182.33		
		06/29/23	INV00059814	01-15.B113	TRAFFIC SAFE SIGNS/STAND	849.41		
		07/11/23	INV00067830	01-13.B114	LAB SUPPLIES	380.30	1412.04	064330
AMY UNDERWOOD	U000189	07/13/23	REIMBURSE	01-11.B117	WEFTEC REGISTRATION	720.00		
		07/13/23	REIMBURSE	01-12.B117	WEFTEC REGISTRATION	1185.00		
		07/13/23	REIMBURSE	01-13.B117	WEFTEC REGISTRATION	110.00		
		07/13/23	REIMBURSE	01-14.B117	WEFTEC REGISTRATION	440.00	2455.00	104974
UNDERCUTTERS	U000190	06/25/23	062523	01-12.B812	TREE/STUMP REMOVAL	1150.00	1150.00	064331
UNO CONSTRUCTION CO., INC.	U000450	07/13/23	JUNE2023	01-14.B910	BSSRAP PROGRAM	64773.72	64773.72	104975
VWR INTERNATIONAL INC.	V000030	06/23/23	8813289876	01-13.B114	LAB SUPPLIES	91.35	91.35	064332
VERIZON WIRELESS	V000135	06/02/23	9938553647	01-12.B112	WWTC TABLETS	165.37		
		06/02/23	9938553647	01-14.B112	SS TABLETS	40.18		
		06/02/23	9938553647	01-15.B112	LS TABLETS	35.99	241.54	064333
WAGNER COMMUNICATIONS, INC	W000070	07/01/23	000029570611	01-11.B112	ANSWERING SERVICE	595.28	595.28	104976
WASTE MANAGEMENT SERVICES, I	NC.W000170	07/06/23	001523220091	01-12.B102	WASTE/RECYCLING	492.67	492.67	064347
WESTFAX	W000350	07/01/23	1424492	01-11.B112	FAXING SERVICE	8.99	8.99	104977
WEST SIDE TRACTOR SALES CO.	W000380	06/21/23	V06899	01-12.B501	LOADER REPAIRS	421.81	421.81	064334
VILLAGE OF WESTMONT	W000450	06/29/23	718249	01-11.B121	METER READING	370.01	370.01	064335
WILLOW RIDGE GLASS & MIRROR	W000620	06/22/23	DGS06222023	01-12.B812	MSB LNCHRM WINDOW REPLACE	23350.00	23350.00	064336
					Total Payments:	434333.91	434333.91	
					ACH Payments Total:	149146.84	.00	
				Ch	neck Payments Total:	285187.07	434333.91	



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NAME	NUMBER	DATE	NUMBER	G/L NUMBER	EXPENSE DESCRIPTION	EXPENSE	CHECK AMT	CHECK N
CHASE	B000050	06/29/23	SUPVPR061523	01-00.2000	FEDERAL TAX WITHHELD	4530.77		
		06/29/23	SUPVPR061523	01-00.2002	SOC SEC WITHHELD	2902.66		
		06/29/23	SUPVPR061523	01-17.E461	EMPLR SOC SEC WITHHELD	2902.67	10336.10	104919
CHASE	в000050	06/29/23	EMPLPR062423	01-00.2000	FEDERAL TAX WITHHELD	9261.38		
		06/29/23	EMPLPR062423	01-00.2002	SOC SEC WITHHELD	6787.07		
		06/29/23	EMPLPR062423	01-17.E461	EMPLR SOC SEC WITHHELD	6787.09	22835.54	104920
CHASE	в000050	07/13/23	EMPLPR070823	01-00.2000	FEDERAL TAX WITHHELD	10115.00		
		07/13/23	EMPLPR070823	01-00.2002	EMPL SOC SEC WITHHELD	7282.81		
		07/13/23	EMPLPR070823	01-17.E461	EMPLR SOC SEC WITHHELD	7282.83	24680.64	104932
D.G. SANIT DIST #XXXXXXXXX111	7 D000400	07/13/23	REIMBURSE	01-00.1001	PAYROLL REIMBURSE	166768.06	166768.06	104937
D.G. SANIT DIST #XXXXXXXXX111	4 D000420	06/28/23	REFUNDS	01-05.3001	REFUNDS	3324.64	3324.64	104936
D.G. SANIT DIST #XXXXXXXXX111	2 D000440	07/13/23	REIMBURSE	01-11.B117	ARU TECH MEETING	60.00	60.00	104930
DUPAGE CREDIT UNION	D000650	06/29/23	EMPLPR062423	01-00.2013	CREDIT UNION WITHHELD	2494.00	2494.00	104918
DUPAGE CREDIT UNION	D000650	07/13/23	EMPLPR070823	01-00.2013	CREDIT UNION WITHHELD	2494.00	2494.00	104931
HEALTH CARE SERVICE CORP.	н000190	06/16/23	165585	01-17.E455	HEALTH INSURANCE	48586.21	48586.21	104927
ILLINOIS DEPARTMENT OF REVENU	JE I000240	06/29/23	SUPVPR061523	01-00.2001	STATE TAX WITHHELD	1782.07	1782.07	104921
ILLINOIS DEPARTMENT OF REVENU	JE I000240	06/29/23	EMPLPR062423	01-00.2001	STATE TAX WITHHELD	4060.39	4060.39	104922
ILLINOIS DEPARTMENT OF REVENU	JE I000240	07/13/23	EMPLPR070823	01-00.2001	STATE TAX WITHHELD	4373.72	4373.72	104933
ILLINOIS MUNICIPAL	I000300	06/29/23	PENSION	01-00.2003	EMPL PENSION DEPOSIT	15811.31		
		06/29/23	PENSION	01-00.2014	EMPL VOL PENSION DEPOSIT	16542.98		
		06/29/23	PENSION	01-17.E460	EMPLR VOL PENSION DEPOSIT	23506.18	55860.47	104928
INVOICE CLOUD	I000750	06/30/23	60720236	01-11.B121	BILLING PORTAL FEES	697.20	697.20	104938
Ronald Kaminski	К000050	06/29/23	REIMURSE	01-14.B129	BURP REIMBURSE	3500.00	3500.00	064298
MIDAMERICA ADMIN HRA ACCOUNT	M000557	06/30/23	HRA Fund	01-17.E455	HRA Acct Funding	600.00	600.00	104925
MIDLAND MASONRY INC.	M000564	06/29/23	01	01-00.2005	MICRSTRN BLG MASON PROJ	21250.00	21250.00	104917
ROBERT SWIRSKY	S000895	07/03/23	Reimburse	01-14.B117	CSWEA Conf Travel Reimb	719.91		
		07/03/23	Reimburse	01-14.C222	CSWEA Conf Travel Reimb	80.14	800.05	104926
TRANSAMERICA RETIREMENT	T000415	06/29/23	SUPVPR061523	01-00.2026	DEF COMP IPPFA	125.04		
		06/29/23	SUPVPR061523	01-00.2027	DEF COMP ROTH IPPFA	40.00		
		06/29/23	SUPVPR061523	01-00.2028	DEF COMP LOAN REPAY IPPFA	77.06	242.10	104923
TRANSAMERICA RETIREMENT	T000415	06/29/23	EMPLPR062423	01-00.2026	DEF COMP IPPFA	473.13		
		06/29/23	EMPLPR062423	01-00.2027	DEF COMP ROTH IPPFA	200.00		
			EMPLPR062423	01-00.2028		195.91	869.04	104924
FRANSAMERICA RETIREMENT	T000415	07/13/23	EMPLPR070823	01-00.2026	DEF COMP IPPFA	465.72		
		07/13/23	EMPLPR070823	01-00.2027	DEF COMP ROTH IPPFA	200.00		
			EMPLPR070823	01-00.2028	DEF COMP LOAN REPAY IPPFA	195.91	861.63	104934
J.S. POSTAL SERVICE	U000130	05/04/23		01-11.B119	POSTAGE	1000.00	1000.00	104915
J.S. POSTAL SERVICE	U000130		REFILL 2	01-11.B119		1000.00	1000.00	104935
Vac-Con, Inc.	V000111		VAC14C226		VAC-CON PURCHASE	482885.00	482885.00	104916
		,, 29		1.0220		========	========	
					Total Payments:	861360.86	861360.86	
					ACH Payments Total:	857860.86	.00	
				C1	eck Payments Total:	3500.00	861360.86	



	VENDOR =======		TMIOTCE					
NAME	NUMBER	DATE			EXPENSE DESCRIPTION	EXPENSE	CHECK AMT	CHECK NO
	DATE							
	REVIEWED							
	TRUSTEE APPROVAL			PRESIDENT				
				CLERK				

ACCOUNTS PAYABLE GENERAL LEDGER RECAP FOR 07/18/23

G/L NUMBER	COST ACCTG DESCRIPTION	DEBIT	CREDIT
01-00.1000	CASH		1295694.77-
01-00.1001	CASH - PAYROLL ACCOUNT	166768.06	
01-00.2000	FEDERAL TAX WITHHELD	23907.15	
01-00.2001	STATE TAX WITHHELD	10216.18	
01-00.2002	SOCIAL SECURITY WITHHELD	16972.54	
01-00.2003	IMRF WITHHELD	15811.31	
01-00.2005	CLEARING	21250.00	
01-00.2013	CREDIT UNION WITHHELD	4988.00	
01-00.2014	VOLUNTARY ADDITIONAL PENSION CONTRIBUTION	16542.98	
01-00.2017	VOLUNTARY GROUP LIFE	256.00	
01-00.2026	DEFERRED COMPENSATION WITHHELD - IPPFA	1063.89	
01-00.2027	DEFERRED COMPENSATION WITHHELD - IPPFA ROTH	440.00	
01-00.2028	DC PLAN LOAN REPAYMENT WITHHELD	468.88	
01-05.3001	USER RECEIPTS	3324.64	
01-11.B100	ELECTRICITY	346.93	
01-11.B102	WATER, GARBAGE AND OTHER UTILITIES	92.66	
01-11.B112	COMMUNICATION	2450.68	
01-11.B113	EMERGENCY/SAFETY EQUIPMENT	2157.85	
01-11.B115	EQUIPMENT/EQUIPMENT REPAIR	22947.60	
01-11.B117	EMPLOYEE/DUTY COSTS	904.88	
01-11.B118	BUILDING AND GROUNDS	1712.14	
01-11.B119	POSTAGE	2002.32	
01-11.B121	USER BILLING MATERIALS	6740.21	
01-11.B124	CONTRACT SERVICES	18875.76	
01-11.B137	MEMBERSHIPS/SUBSCRIPTIONS	134.40	
01-11.C222	GAS/FUEL	102.84	
01-11.C225	OPERATION/REPAIR	59.84	
01-12.B100	ELECTRICITY	10367.59	
01-12.B102	WATER, GARBAGE AND OTHER UTILITIES	4653.62	
01-12.B112	COMMUNICATION	967.64	
01-12.B113	EMERGENCY/SAFETY EQUIPMENT	165.30	
01-12.B116	SUPPLIES	596.12	
01-12.B117	EMPLOYEE/DUTY COSTS	1996.18	
01-12.B130	NPDES PERMIT FEES	53000.00	
01-12.B402	CHEMICALS - SLUDGE DEWATERING	3074.04	
01-12.B404	CHEMICALS - OTHER	2487.03	
01-12.B501	EQPT/EQPT REPAIR - BIOSOLIDS AGING & DISPOSAL	640.60	
01-12.B505	EQPT/EQPT REPAIR - INFLUENT PUMPING	5242.36	
01-12.B506	EQPT/EQPT REPAIR - PRIMARY TREATMENT	877.43	
01-12.B507	EQPT/EQPT REPAIR - SECONDARY TREATMENT	862.43	
01-12.B508	EQPT/EQPT REPAIR - SLUDGE CONCENTRATION	218.56	
01-12.B509	EQPT/EQPT REPAIR - SLUDGE DEWATERING	13696.29	
01-12.B510	EQPT/EQPT REPAIR - SLUDGE DIGESTION		
01-12.B511	EQPT/EQPT REPAIR - TERTIARY TREATMENT	244.68	
01-12.B512	EQPT/EQPT REPAIR - WWTC GENERAL	1443.45	
01-12.B513	EQPT/EQPT REPAIR - WWTC UTILITIES	1297.75	



ACCOUNTS PAYABLE GENERAL LEDGER RECAP FOR 07/18/23

Date: 07/14/23 Time: 11:19am

G/L NUMBER	COST ACCTG DESCRIPTION	DEBIT	CREDIT
01-12.B810	BLDG AND GROUNDS - SLUDGE DIGESTION	194.08	
01-12.B812	BLDG AND GROUNDS - WWTC GENERAL	29887.71	
01-12.C222	GAS/FUEL	1290.86	
01-12.C225	OPERATION/REPAIR	34.23	
01-13.B112	COMMUNICATION	65.19	
01-13.B114	CHEMICALS	600.55	
01-13.B116	SUPPLIES	1787.59	
01-13.B117	EMPLOYEE/DUTY COSTS	110.00	
01-13.B123	OUTSIDE LAB SERVICES	501.53	
01-13.C222	GAS/FUEL	9.88	
01-14.B112	COMMUNICATION	243.75	
01-14.B115	EQUIPMENT/EQUIPMENT REPAIR	670.92	
01-14.B116	SUPPLIES	596.34	
01-14.B117	EMPLOYEE/DUTY COSTS	1319.91	
01-14.B129	REIMBURSEMENT PROGRAM/PUBLIC SEWER BLOCKAGES	3500.00	
01-14.B910	SEWER SYSTEM REPAIRS - BSSRAP PROGRAM	65871.35	
01-14.C222	GAS/FUEL	1351.93	
01-14.C225	OPERATION/REPAIR	4322.93	
01-14.C226	VEHICLE PURCHASES	482885.00	
01-15.B100	ELECTRICITY	1933.22	
01-15.B112	COMMUNICATION	35.99	
01-15.B113	EMERGENCY/SAFETY EQUIPMENT	862.30	
01-15.B525	EQPT/EQPT REPAIR - LIBERTY PARK	35.28	
01-15.B529	EQPT/EQPT REPAIR - LIFT STATIONS GENERAL	42.03	
01-15.B820	BLDG AND GROUNDS - BUTTERFIELD	185.25	
01-15.B821	BLDG AND GROUNDS - CENTEX	185.25	
01-15.B823	BLDG AND GROUNDS - EARLSTON	185.25	
01-15.B824	BLDG AND GROUNDS - HOBSON	185.25	
01-15.B825	BLDG AND GROUNDS - LIBERTY PARK	185.25	
01-15.B826	BLDG AND GROUNDS - NORTHWEST	727.03	
01-15.B827	BLDG AND GROUNDS - VENARD	185.25	
01-15.B828	BLDG AND GROUNDS - WROBLE	185.25	
01-15.B829	BLDG AND GROUNDS - LIFT STATIONS GENERAL	372.80	
01-17.E452	LIABILITY/PROPERTY	4140.00	
01-17.E455	EMPLOYEE GROUP HEALTH	50024.54	
01-17.E460	IMRF	23506.18	
01-17.E461	SOCIAL SECURITY	16972.59	

1295694.77 1295694.77-

Vendor	Invoice Date	Amount	Coding	Coding Description	Purchase Location	Emp.	Procurement	Project Name (If applicable)	Item Description	
Grainger	06/21/23	\$829.80	01-13.B116	LAB SUPPLIES	Delivered	RB			Glass Microfiber Filter	
Grainger	06/21/23	\$44.43	01-12.B506	EQPT/EQPT REPAIR - PRIMARY TREATMENT	Delivered	MM			Heavy duty skimming rake for OPS	
Grainger	06/22/23	\$77.07	01-12.B512	EQPT/EQPT REPAIR - WWTC GENERAL	Delivered	AC		Maintenance Repair Supplies	1/2" stainless steel nuts(75) and bolts(60)	
Grainger	06/22/23	\$10.50	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	Delivered	MR		Building Maintenance Repair Supplies	LED lamp	
Grainger	06/23/23	\$9.24	01-12.C225	OPERATION/REPAIR	Delivered	AC		2020 F350 4x4 (304)	Oval Reflector (2)	
Grainger	06/23/23	\$160.84	01-12.B512	EQPT/EQPT REPAIR - WWTC GENERAL	Delivered	AC		Maintenance Repair Supplies	Misc. stainless steel hardware supplies	
Grainger	06/26/23	\$113.86	01-12.B116	WWTC SUPPLIES	Delivered	MM			Oil absorbent pads	
Grainger	06/26/23	\$32.98	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	Delivered	JB			Handle	
Grainger	06/27/23	-\$4.25	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	In-Store	MR		ComEd Rebate	LED lamp	
Grainger	06/27/23	\$205.03	01-12.B508	EQPT/EQPT REPAIR - SLUDGE CONCENTRATION	Delivered	NW		TWAS Thickener	ASCO Solenoid	
Grainger	06/28/23	\$165.30	01-12.B113	WWTC EMERGENCY/SAFETY EQUIPMENT	Delivered	MM			Disposable nitrile gloves for OPS	
Grainger	06/28/23	\$22.68	01-12.B511	EQPT/EQPT REPAIR - TERTIARY TREATMENT	Delivered	AC		Intermediate 3 Bridge rail and catwalk replacement	Drill bit (6)	
Grainger	06/29/23	\$399.85	01-12.B512	EQPT/EQPT REPAIR - WWTC GENERAL	Delivered	AC		Shop Equipment	2000 lb. 20 ft Chain Hoist	
Grainger	06/30/23	\$131.68	01-12.B512	EQPT/EQPT REPAIR - WWTC GENERAL	Delivered	AC		Maintenance Repair Supplies	Hardware & Plumbing Supplies	
Grainger	07/03/23	-\$32.98	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	In-Store	СР		Door Handle	Door Handle (Returned)	
Grainger	07/05/23	\$90.46	01-12.B512	EQPT/EQPT REPAIR - WWTC GENERAL	Delivered	RF		Electrical Repair Supplies	Ring Terminals (4) Boxes	
Grainger	07/05/23	\$12.89	01-15.B113	EMERGENCY/SAFETY EQUIPMENT	Delivered	BS		Safety Sign	No Trespassing Sign	
Grainger	07/05/23	\$35.28	01-15.B525	EQUIP/EQUIP REPAIR - LIBERTY PARK	Delivered	FF		Electrical Enclosure Cooling System	Air Filter Media	
Grainger	07/05/23	\$20.34	01-12.B116	WWTC SUPPLIES	Delivered	JPB		Supplies (Batteries)	AA Batteries (3) Boxes	
Grainger	07/06/23	\$13.53	01-12.B508	EQPT/EQPT REPAIR - SLUDGE CONCENTRATION	Delivered	RF		TWAS Thickener	5-Pin Connector Cordset	
Grainger	07/06/23	\$183.26	01-12.B508	EQPT/EQPT REPAIR - SLUDGE CONCENTRATION	Delivered	RF		TWAS Thickener	Ultrasonic Sensor	
Grainger	07/11/23	-\$183.26	01-12.B508	EQPT/EQPT REPAIR - SLUDGE CONCENTRATION	In-Store	RF		TWAS Thickener	Ultrasonic Sensor (Returned)	
lome Depot	06/21/23	\$142.94	01-14.B115	SEWER SYSTEM EQUIPMENT/EQUIPMENT REPAIR	In-Store	АН		Supplies for the Vac-Con	Grease gun, measuring tape	
lome Depot	06/30/23	\$129.36	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	In-Store	СР		Lunchroom Window Replacement, Interior	Window Casing	
lome Depot	06/20/23	\$143.46	01-11B118		In-Store	JB			Admin Remodel	
lome Depot	07/10/23	\$121.70	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	In-Store	СР		Lunchroom Window Replacement, Interior	Stain, Morter & Misc. Supplies	
lome Depot	06/28/23	\$29.93	01-12.B512	EQPT/EQPT REPAIR - WWTC GENERAL	In-Store	RF		Maintenance Repair Supplies	Stake Flags(100), White Marking Paint(2)	
lome Depot	07/07/23	\$26.34	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	In-Store	СР		Lunchroom Window Replacement, Interior	DynaFlex Caulk	
lome Depot	06/27/23	\$65.78	01-14.B116	SEWER SYSTEM SUPPLIES	In-Store	BS			Sewer System Supplies	
lome Depot	06/26/23	\$319.32	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	In-Store	СР		Lunchroom Window Replacement, Interior	Lumber (boards) & miscellaneous building materials	
lome Depot	06/26/23	\$29.94	01-14.B116	SEWER SYSTEM SUPPLIES	In-Store	АН			utility knife and blades	
lome Depot	06/26/23	-\$22.49	01-12.B116	WWTC SUPPLIES	In-Store	BS		Supplies	Cell Phone Case (Return)	
lome Depot	07/03/23	\$90.72	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	In-Store	СР		Lunchroom Window Replacement, Interior	Drywall & Painting Supplies	
lome Depot	07/03/23	-\$20.98	01-12.B812	BLDG & GROUNDS - WWTC GENERAL	In-Store	СР		Lunchroom Window Replacement, Interior	(Return) Hardware & Plumbing Supplies	
•										

07.13.23 Date: Due Date: 07.18.23

Petty Cash Checking Reimbursement

D-440

Reimburse Invoice #:

Date **Purchased From** 07.05.23 **IAWA**

Description **ARU Tech Meeting**

Code 11B117 Amount Ck No. 60.00

3861

Total Receipts/Reimbursement 60.00

Expense by code

60.00 11B117

TOTAL 60.00 Date: 7/13/2023 Petty Cash Reimbursement P - 350

Due Date: 7/18/2023

Invoice #: Cash Box

Date	Purchased From	Reimbursed To	Description	Code	Amount
6/29/23	Home Depot	A. Underwood	Safety Glasses	11B113	12.98
6/30/23	Los Dos		Sups Lunch	11B117	124.88
7/11/23	USPS	M. MacQuilkin	Postage	11B119	2.32
			Total Receipts		140.18

Expense by code

 11B117
 124.88

 11B119
 2.32

 11B113
 12.98

140.18

Board of Trustees Wallace D. Van Buren President Amy E. Sejnost Vice President Jeremy M. Wang Clerk



Legal Counsel

Amy R. Underwood, P.E.

General Manager

Daniel McCormick, P.C.

2710 Curtiss Street P.O. Box 1412 Downers Grove, IL 60515-0703 Phone: 630-969-0664 Fax: 630-969-0827 www.dgsd.org

Providing a Better Environment for South Central DuPage County

MEMORANDUM

To: Board of Trustees

From: Amy R. Underwood, General Manager

Date: July 14, 2023

Subject: 2023 CSWEA Operations Award - Illinois

As the current President of Central States Water Environment Association (CSWEA), I will be presenting the 2023 CSWEA Operations Award to District Maintenance Supervisor Jeff Barta during the July 18 Board meeting. A description of CSWEA, the award and an excerpt about Jeff from the submitted nomination are provided below for your information. District Sewer Maintenance Supervisor Bob Swirsky accepted the award on behalf of Jeff at the CSWEA Annual Meeting in St. Paul, MN in May as Jeff was unable to attend the meeting. The District congratulates Jeff on this well-deserved recognition.

CENTRAL STATES WATER ENVIRONMENT ASSOCIATION

The Central States Water Environment Association (CSWEA), which was established in 1927, is the local member association for the Water Environment Federation (WEF) covering Illinois, Wisconsin and Minnesota. CSWEA focuses on water quality education and networking with the mission of offering multiple opportunities for the exchange of water quality knowledge and experiences among its members and the public and to foster a greater awareness of water quality achievements and challenges. Several Downers Grove Sanitary District employees are members of both WEF and CSWEA.

OPERATIONS AWARD

The Operations Award is given in recognition of outstanding wastewater treatment plant operation and demonstration of professionalism. Central States gives out this award annually to one recipient in each member state (Illinois, Minnesota and Wisconsin).

Recipient: Jeff Barta

Jeff Barta started at the Downers Grove Sanitary District (DGSD) in 1984 and has been Maintenance Supervisor since 1998. Jeff supervisors seven employees and is responsible for maintenance of the DGSD wastewater treatment center (WWTC) and operations and maintenance of nine lift stations. Under Jeff's guidance, the DGSD Maintenance Department performs high quality work very cost effectively, which translates to low rates and fees for DGSD customers. Under Jeff's tenure, DGSD implemented an asset management program/software to do maintenance scheduling/planning, fixed asset accounting, condition assessment, budgeting and record service history. This program has been critical for DGSD to proactively keep up with the needs of our aging infrastructure. Also under Jeff's tenure, permanent backup generators were installed at all lift stations to ensure they were always operational, preventing potential backups. Over the past decade, DGSD made a commitment for its WWTC to become a net zero energy facility. Jeff was instrumental in making this commitment a reality by ensuring that maintenance staff were trained to work on the DGSD combined heat and power (CHP) engines, resulting in cost savings in maintenance labor and in reduced downtime of the CHPs (i.e., maximizing energy production).

C: BOLI, DM, CS

DOWNERS GROVE SANITARY DISTRICT

MEMO

TO: Amy R. Underwood General Manager

FROM: Carly Shaw

Administrative Supervisor

DATE: July 13, 2023

RE: Resolution of Appreciation

Attached is a Resolution of Appreciation for Jeffery P. Barta for his years of dedicated service to the District. We will present the original framed Resolution to him at a later time with a copy remaining on file at the District. This item should be placed on the agenda for the July 18 Board meeting.

Attachment

C: WDVB, AES, JMW, KJR, RTJ, MJS, DM

RESOLUTION OF APPRECIATION

WHEREAS JEFFERY P. BARTA, has served the residents of the DOWNERS GROVE SANITARY DISTRICT as a Sewer System Maintenance Technician briefly in 1984, a Mechanic from 1984 to 1993, an Electrical Technician from 1994 to 1998, an Electrical Supervisor from 1999 to 2003, and the Maintenance Supervisor including his duties as an Electrical Supervisor from 2004 to 2023; and

WHEREAS JEFFERY P. BARTA, a certified Electrician, helped to install, implement, and maintain the supervisory control and data acquisition (SCADA) system that has monitored and controlled the District facilities for twenty-five years; and

WHEREAS under the supervision of JEFFERY P. BARTA as Maintenance Supervisor the District's Wastewater Treatment Center and nine lift stations and force mains are maintained in a most cost-effective means; and

WHEREAS JEFFERY P. BARTA assisted the District in completing several major construction projects, including three lift station replacements, installation of emergency generators at all the lift stations and energy efficiency improvements at the Wastewater Treatment Center which resulted in it becoming a net-zero energy facility; and

WHEREAS JEFFERY P. BARTA has exhibited an unfailing and loyal dedication to public service by his willingness to respond to and work many hours during emergency operations at the Wastewater Treatment Center during his thirty-nine and a half years of public service; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Trustees of the DOWNERS GROVE SANITARY DISTRICT, that JEFFERY P. BARTA be, and he is hereby commended for his loyal, dedicated, and exemplary service to the DOWNERS GROVE SANITARY DISTRICT and to the residents thereof; and

BE IT FURTHER RESOLVED that a copy of this Resolution be spread upon the records of the DOWNERS GROVE SANITARY DISTRICT and an embossed copy thereof be delivered by the Clerk of this District to the said JEFFERY P. BARTA.

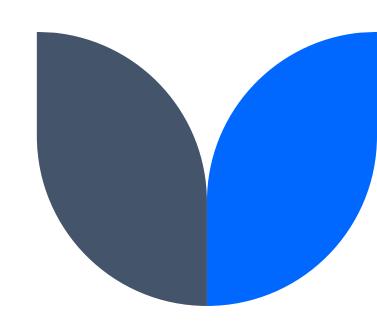
PASSED AND APPROVED by the Board of Trustees of the DOWNERS GROVE SANITARY DISTRICT, this 18th day of July 2023, in honor of the thirty-nine and a half years of outstanding service by JEFFERY P. BARTA to the District.

DOWNERS GROVE SANITARY DISTRICT

BY:	
	President
BY:	
D1.	Vice President
ATTEST:	
	Clerk

Financial Reporting and Audit

Carly Shaw



Agenda

Introduction

Staff Reports

Independent Financial Audit

Financial Reports Details

Auditor's Final Report

Other Opportunities & Reports



Introduction

The District's Fiscal Year runs from May 1 – April 30. The budget is presented and approved prior to the start of the fiscal year. Financial reports are included in the Board Packet each month for the prior month's activities. At the end of the Fiscal Year an audit is performed by a third party and a Financial Report is prepared and presented to the Board in the summer.

Staff Reports

Five-Year Plan – fiscal year budget and projections for next four years.

Monthly Treasurer's Report – Tracks monthly progress of revenues and expenses.

Investment Schedule – Month-end snapshot of account balances for all bank and investment accounts.



Independent Financial Audit

- Required by statute to perform audit annually. Auditors also work in accordance with standards published in the Generally Accepted Government Auditing Standards (GAGAS).
- An audit planning meeting takes place before end of fiscal year. Auditor provides a list of preliminary items needed and a preliminary schedule for each step of the audit.
- Auditors visit onsite up to three days for fieldwork. They request documents to test procedures and check accuracy of selected transactions.
- Upon completion of the fieldwork analysis to ensure records follow generally accepted accounting principals (GAAP), a draft of the financial report is created and shared with District for review.
- District is responsible for the accuracy of the information in the Financial Report and must agree with any reconciliations done for audit purposes.

Financial Report Details

Independent Auditor Report

Opinion issued by auditor on financial statements. Provide report on internal control, compliance and other matters.

Management Discussion & Analysis

District responsible for content. Summarizes portions of the basic financial statements and includes general discussion.

Basic Financial Statements

Reports Include:

- Statement of Net Position how activity over FY impacts assets related to liabilities.
- Statement of Activities categorizes revenues and expenses by fund.
- Balance Sheet assets, liabilities and fund balances.
- Statement of Revenues, Expenditures & Changes in Fund Balances (Fiscal Year activity only)



Financial Report Details Continued

Required Supplementary Info

- Schedule of Employer Contributions (IMRF)
- Schedule of Changes in the Employers Net Pension Liability (IMRF)
- Schedule of Changes in Employers Total Other Post Employment Benefit (OPEB) Liability
- Schedule of Revenues, Expenditures, and Changes in Fund Balance (Budget & Actual General Fund)

Supplemental Schedule

- Schedule of Expenditures (Budget & Actual General Fund)
- Schedule of Revenues, Expenditures and Changes in Fund Balance (Budget & Actual Improvement & Construction Funds)

Other Supplementary Info

 Long Term Debt Requirements – IEPA Loan Payable of 2010



Auditor Final Report

All financial reports are compiled into a booklet and include a cover page and table of contents. All notes related to the reports provided are also included. This is then presented to the Board by our auditor at the monthly meeting following finalization. The link below is to the fiscal year 2021-2022 audit so you can see the completed Financial Report DGSD-Audit-FY-21-22.pdf.

Other Opportunities & Reports



Performance
Audit for projects
or review of
purchases made
during a set
period of time.

2

Bank Account Balances –

Bank balances could be audited, and a report provided at end of fiscal year. 3

Bank Statements –
Staff could provide
bank statements to the
Board for investment
schedule accounts.

4

Invoice Backup –
Is available upon request to ensure accuracy of invoices paid.

Documents Included for Reference

Fund Balance/Net Assets Policy

- Defines 3 categories of fund balances.
- Explanation of Districts Governmental Funds and how they are categorized.
- Explanation of District's process for capital asset accounting.

Government Accounting Standards

- Last revised in 2018.
- Requirements for compliance with GAGAS.
- Standards for conducting and reporting on financial audits.



Summary

The District maintains a high level of reporting on all financial activities by following an internal controls procedure and the fund balances and net assets policy as well as a capital asset policy to help ensure accuracy of information. Reports are supplied to the Board of Trustees on a monthly basis to give them a summary of these transactions. Our five-year financial plan is presented to the Board for approval for each fiscal year. At the end of the fiscal year an audit is performed by and independent auditor to ensure the accuracy of our financial data and to ensure compliance with the generally accepted accounting principals. This report is presented to the Board once completed.

DOWNERS GROVE SANITARY DISTRICT FUND BALANCE/NET ASSETS POLICY August 16, 2016

Purpose

A Fund Balance/Net Assets Policy establishes a minimum level at which the projected end-of-year fund balance/net assets must observe; as a result of the constraints imposed upon the resources reported by the governmental and proprietary funds. This policy is established to provide financial stability, cash flow for operations, and the assurance that the District will be able to respond to emergencies with fiscal strength. More detailed fund balance financial reporting and the increased disclosures will aid the user of the financial statements in understanding the availability of resources.

It is the District's philosophy to support long-term financial strategies, where fiscal sustainability is its first priority, while also building funds for future growth. It is essential to maintain adequate levels of funds balance/net assets to mitigate current and future risks and to ensure tax rates. Fund balance/net asset levels are also crucial consideration in long-term financial planning. Credit rating agencies carefully monitor levels of fund balance/net assets and unassigned fund balance in the General Fund to evaluate the District's continued creditworthiness.

Definitions

Governmental Funds

The fund balance will be composed of three primary categories:

- 1) Nonspendable Fund Balance portion of a Governmental Fund's fund balance that are not available to be spent, either in the short-term or long-term, or through legal restrictions (e.g., inventories, prepaid items, land held for resale and endowments).
- 2) Restricted Fund Balance portion of a Governmental Fund's fund balance that are subject to external enforceable legal restrictions (e.g., grantor, contributor and property tax levies).
- 3) Unrestricted Fund Balance is made up of three components:
 - A) Committed Fund Balance the portion of a Governmental Fund's fund balance with self-imposed constraints or limitations that have been placed at the highest level of decision making through formal Board action. The same action is required to remove the commitment of fund balance.
 - B) Assigned Fund Balance the portion of a Governmental Fund's fund balance to denote an intended use of resources but with no formal Board action.
 - C) Unassigned Fund Balance available expendable financial resources in a governmental fund that is not the object of tentative management plan.

Some funds are funded by a variety of resources, including both restricted and unrestricted (committed, assigned and unassigned). The District assumes that the order of spending fund balance is as follows: restricted, committed, assigned, unassigned.

Authority

Governmental Funds

Committed Fund Balance – A self-imposed constraint on spending the fund balance must be approved by ordinance or resolution of the Board. Any modifications or removal of the self-imposed constraint must use the same action used to commit the fund balance. Formal action to commit fund balance must occur before the end of the fiscal year. The dollar amount of the commitment can be determined after year end.

Assigned Fund Balance – A self-imposed constraint on spending the fund balance based on the District's intent to use fund balance for a specific purpose. The authority may be delegated to members of the management team by the Board.

Minimum Unrestricted Fund Balance Levels

Governmental Funds

General Fund

Purpose – Is a major fund and the general operating fund of the District. It is used to account for all activities that are accounted for in another fund.

Fund Balance – Unrestricted fund balance targets should represent 25% of annual operating expenditures. Year-end balances above or below the target are considered when establishing subsequent adjustments in revenue rates.

Special Revenue Fund

Purpose - Used to account for and report the proceeds of specific revenue sources that are legally restricted or committed to expenditures for specified purposes other than debt service or capital projects.

Financing – Special revenue funds are provided by a specific restricted and/or committed revenue source. Financing may also be received from other charges for services, interest income, etc.

Fund Balance – Derived from a restricted revenue source; therefore, legally restricted. The remaining fund balance will be adjusted annually with the adoption of the annual budget and is targeted to meet potential future needs.

Debt Service Fund

Purpose – Established to account for financial resources that are restricted, committed, or assigned to expenditure for principal and interest.

Financing – The municipality levies an amount or transfers in an amount close to the principal and interest that is anticipated to be paid.

Fund Balance –Derived from property taxes; therefore, legally restricted. Any fund balance accumulation should be targeted as a maximum of the amount of the next principal and interest payment due.

Minimum Unrestricted Fund Balance Levels - Continued

Capital Projects Fund

Purpose - Established to account for and report financial resources that are restricted, committed, or assigned to expenditure for capital outlays including the acquisition or construction of capital facilities and other capital assets, excluding those types of capital related outflows financed by special revenue funds.

Financing – Specific charges, debt financing, grants, interest income or interfund transfers are used to finance projects.

Fund Balance – Considered segregated for construction and land acquisition; therefore, considered committed, restricted, or assigned depending on the intended source/use of the funds. The remaining fund balance will be adjusted annually with the adoption of the annual budget and is targeted to meet potential future needs identified in the 5-year plan.

Other Considerations

In establishing the above policies for unrestricted fund balance/net asset levels, the District considered the following factors:

- The predictability of the District's revenues and the volatility of its expenditures (i.e., higher levels of unrestricted fund balance may be needed if significant revenue sources are subject to unpredictable fluctuations or if operating expenditures are highly volatile)
- The District's perceived exposure to significant one-time outlays (e.g., disasters, immediate capital needs, state budget cuts)
- The potential drain upon General Fund resources from other funds as well as the availability of resources in other funds (i.e., deficits in other funds may require a higher level of unrestricted fund balance be maintained in the General Fund, just as, the availability of resources in other funds may reduce the amount of unrestricted fund balance needed in the General Fund)
- Liquidity (i.e., a disparity between when financial resources actually become available to make payments and the average maturity of related liabilities may require that a higher level of resources be maintained)
- Commitments and assignments (i.e., governments may wish to maintain higher levels of unrestricted fund balance to compensate for any portion of unrestricted fund balance already committed or assigned by the government for a specific purpose)

If any of the above factors change, the District should readdress current unrestricted fund balance/net asset levels to ensure amounts are appropriate.

DOWNERS GROVE SANITARY DISTRICT CAPITAL ASSET POLICY August 16, 2016

Purpose

The purpose of this document is to explain the District's process for capital asset accounting. The District acquires and constructs capital assets in pursuit of its mission. In line with GAAP and best business practices, this document sets forth the requirements for accounting for these assets, as well as the definitions of different types of such assets. To account for assets with depreciating values and to amortize them over their useful lives, capital assets must be recorded and capitalized in accordance with U.S. GAAP. Purchases and acquisitions that do not meet the definition of capital assets are neither added to the capital asset accounts nor are they depreciated; rather they are fully expensed at the time of acquisition.

Definitions

Accumulated depreciation – The total reduction in value over time of an asset since its acquisition, which is recorded for financial statement purposes.

Acquisition cost/value – Assets should be recorded and reported at their historical costs, which include the vendor's invoice, plus sales tax, initial installation cost, modifications, attachments, accessories or apparatus necessary to make the asset usable and render it into service. Historical costs also include ancillary charges such as site preparation costs and professional fees.

Additions – Newly acquired assets or upgrades to existing assets. Upgrades include capital outlays that increase the useful life or value of the asset.

Appraised value – The estimated value of an asset based on the expertise of a qualified independent appraiser.

Building – A roofed, enclosed facility intended for the permanent or temporary shelter of persons or equipment.

Capital asset – A permanent item with a useful life that extends beyond one year, which is held for purposes other than investment or resale. Capital assets include land, land improvements other than buildings, infrastructure, buildings, equipment, vehicles and services necessary to the construction or installation of capital assets which are of long term value.

Capital asset upgrades – Capital costs that increase the value of a capital asset. An upgrade should be capitalized as a betterment and recorded as an addition of the value of the existing capital asset. The depreciable life of the upgrade is calculated separately from the original capital asset cost.

Construction in progress – An asset that is comprised of the substantially incomplete construction or installation costs of a capital asset.

Date placed in service – The date at which the capital asset becomes available for use.

Definitions – Continued

Depreciation – A method for allocating the acquisition cost/value of capital assets over time. GAAP requires that the value of capital assets must be written off as an expense ("depreciation expense") over the useful life of the asset.

Disposition – The final status of an asset when it is removed from the capital asset accounts and is no longer physically located on the District's property, e.g., upon sale, scrap, or donation.

Infrastructure – Assets that are long-lived capital assets that normally are stationary in nature and can be preserved for a significantly greater number of years than other capital assets. They include sewers, structures, pipelines, roadways and sidewalks that the District has purchased/constructed/accepted to fulfill its mission.

Improvement other than building – A modification to an outside area, other than repairs, e.g., sidewalks, parking lots, utility lines, fences.

IT equipment - All computerized and auxiliary automated equipment used in information handling, storage, and retrieval and all voice, video, data communications, and other communications systems equipment and controls.

Land – The surface or crust of the earth, which can be used to support structures, and may be used to grow crops, grass, shrubs, and trees. Land is characterized as having an unlimited life (indefinite) and is not depreciated.

Maintenance – Activities related to the repair and upkeep of an asset, with the intent of preserving the asset's original useful life and function.

Market value – The cost to acquire an item in its current condition through an arm's length transaction. Also referred to as "fair market value" and "fair value".

Movable equipment – An item that is neither permanently affixed to nor part of a building, e.g., vehicles, computers.

Net Book value – The difference between the acquisition cost and accumulated depreciation. At the time of acquisition book value equals acquisition cost/value.

Obsolescence – A factor to consider when determining the disposition of an asset. Assets are obsolete when they are no longer useful to the District.

Scrap equipment – An item that can be discarded as worthless or broken down into parts for disposal or salvage.

Surplus equipment – An item or items that are no longer needed or required.

Useful life – The period over which a capital asset has utility to the District in performing the function for which it was purchased.

Vehicles – Automobiles and trucks. This asset category includes any additions needed to allow a vehicle to perform its function such as a plow being added to a pickup truck to enable it to move snow.

Determining the Acquisition Cost/Value of Capital Assets

Non-sewer assets - Purchased assets are valued for accounting purposes at the total of their purchase price and any related costs for transportation, installation, or other direct, identifiable expense involved in procuring the asset and readying it for its intended use. Costs for maintenance or service agreements are not considered part of the asset cost and should be expensed. Constructed assets are valued at the total amount paid for acquiring or improving the asset including land; labor; materials; engineering, design and inspection fees; construction management fees; charges by brokers or others; appraisal fees; site preparation fees; and legal, title, and filing fees. Invoices that document the capitalized amounts are maintained as claims, and recorded periodically in the non-sewer asset database, on at least an annual basis.

Sewer assets – New sewer assets are valued for accounting purposes by recording the total length and pipe diameter for all installed sewers, and applying age-adjusted unit prices that are intended to include all costs of new sewer construction. Unit prices were developed for each pipe size in 2004 using standard engineering cost estimating practice, and these unit prices are age-adjusted using the ENR Construction Cost Index. Unit prices are periodically checked against actual construction costs, and new unit prices can be developed if cost estimates show significant variance from actual construction costs. Other sewer assets such as liners and rehabilitation are valued using actual construction costs, similar to non-sewer assets.

What to Capitalize

Any non-sewer capital asset additions and upgrades with a useful life of greater than one year will be recorded as a capital asset if its cost equals or exceeds \$5,000. Non-sewer capital asset additions are recorded as new equipment in the MP2 database, on at least an annual basis. Upgrades are recorded as Upgrade work orders in the MP2 database on at least a monthly basis. Work orders involving preventive maintenance or repairs that do not meet the definition of *Capital asset upgrades* are not designated as Upgrade work orders.

New sewer asset additions are capitalized at their estimated value with no threshold, since the methodology does not include identification of an actual cost against which to assess a threshold. Sewer asset additions are recorded in the Lucity database on at least an annual basis, and transferred into the sewer asset spreadsheet annually.

Land is capitalized at full acquisition cost or value with no threshold.

Depreciation Method

All capital assets are depreciated using the straight line method. The annual report summarizing depreciation will be reviewed and approved by the General Manager. No depreciation is recorded in the year of acquisition or disposal.

Useful Lives

Useful lives will be reviewed annually by the General Manager. The District depreciates over the following useful lives:

Infrastructure

Sanitary sewer - new	100 years
Sanitary sewer liner	50 years
Sanitary sewer rehabilitation – grout, sealing, coatings	20 years
Plant piping	62.5 years
Plant structures – tanks, tunnels	75 years

Lift stations/forcemains Improvements – roads, outside lighting, fencing, electric, etc	50 years 25 years
Buildings	75 years
Masonry	75 years
Pole/frame	50 years
Steel shed	25 years
Equipment	
Process equipment	25 years
Pumps and blowers	25 years
Sewer televising equipment and portable flow meters	10 years
Light duty portable / samplers	10 years
Instrumentation and controls	25 years
IT	5 years
Vehicles	
Light vehicles	10 years

Rehabilitations, Reconstruction, and Repairs

When any item of infrastructure is fully re-constructed the cost of the old asset, if determinable, is removed from the capital accounts, along with its related accumulated depreciation. Routine repairs and maintenance, e.g., intermittent equipment repairs, are not capitalized but instead are charged as expense to the general fund. All determinations of these categories of infrastructure will be reviewed by the General Manager.

Sales and/or Retirements of Assets

Heavy vehicles

When a capital asset is disposed of, sold, or retired, its cost and accumulated depreciation are removed from the District's books and a gain or loss, if any, is recognized. These changes are recorded in the MP2 equipment list. An asset is removed from the capital asset accounts when it is determined that the asset is no longer operable, has been replaced, or is no longer available for use. Retirement may consist of sale, scrap, or donation of the asset. Notification of an asset retirement is verified by appropriate supervisors with authority over specific assets.

Responsible Parties

The General Manager is responsible for entering capital asset additions and retirements in the MP2 database equipment list or the sewer system spreadsheet, computing depreciation expense, and reporting capital assets and depreciation expense accurately in the District's GAAP financial statements. Ancillary to this responsibility is a process to periodically determine the completion of construction and engineering projects and on an annual basis to move amounts identified as construction in progress to the capital asset table or database, where depreciation commences. All entries to the MP2 database or sewer spreadsheet must be supported by detailed claims documentation and amounts reflected in the treasurer's report.

15 years



By the Comptroller General of the United States

July 2018

GOVERNMENT AUDITING STANDARDS

2018 Revision



By the Comptroller General of the United States

July 2018

GOVERNMENT AUDITING STANDARDS

2018 Revision

The 2018 revision of *Government Auditing Standards* is effective for financial audits, attestation engagements, and reviews of financial statements for periods ending on or after June 30, 2020, and for performance audits beginning on or after July 1, 2019. Early implementation is not permitted. The 2018 revision of *Government Auditing Standards* supersedes the 2011 revision (GAO-12-331G, December 2011), the 2005 *Government Auditing Standards: Guidance on GAGAS Requirements for Continuing Professional Education* (GAO-05-568G, April 2005), and the 2014 *Government Auditing Standards: Guidance for Understanding the New Peer Review Ratings* (D06602, January 2014). The 2018 revision should be used until further updates and revisions are made. An electronic version of this document can be accessed on GAO's Yellow Book web page at http://www.gao.gov/yellowbook.

Contents

Letter		1
Chapter 1: Foundation and Princ	siples for the Use and Application of Government Auditing Standards	3
	Introduction	3
	Types of GAGAS Users	6
	Types of GAGAS Engagements	7
	Financial Audits	7
	Attestation Engagements and Reviews of Financial	
	Statements	9
	Performance Audits	10
	Terms Used in GAGAS	15
	The GAGAS Format	16
Chapter 2: General Requirement	ts for Complying with Government Auditing Standards	18
	Complying with GAGAS	18
	Relationship between GAGAS and Other Professional Standards	20
	Stating Compliance with GAGAS in the Audit Report	22
Chapter 3: Ethics, Independence	e, and Professional Judgment	25
	Ethical Principles	25
	The Public Interest	26
	Integrity	26
	Objectivity	27
	Proper Use of Government Information, Resources, and	
	Positions	27
	Professional Behavior	28
	Independence	28
	GAGAS Conceptual Framework Approach to	
	Independence	31
	Provision of Nonaudit Services to Audited Entities	43
	Consideration of Specific Nonaudit Services	50
	Documentation	57
	Professional Judgment	58
Chapter 4: Competence and Cor	ntinuing Professional Education	63
	Competence	63
	Continuing Professional Education	67

Chapter 5: Quality Control and Peer Re	eview	81
Q	uality Control and Assurance	81
	System of Quality Control	81
	Leadership Responsibilities for Quality within the Audit	
	Organization	82
	Independence, Legal, and Ethical Requirements	82
	Initiation, Acceptance, and Continuance of Engagements	84
	Human Resources	84
	Engagement Performance	86
	Monitoring of Quality	91
Ex	xternal Peer Review	96
	Additional Requirements for Audit Organizations Not	
	Affiliated with Recognized Organizations	102
Chapter 6: Standards for Financial Aud	lits	109
Ac	dditional GAGAS Requirements for Conducting Financial Audits	109
	Compliance with Standards	109
	Licensing and Certification	110
	Auditor Communication	110
	Results of Previous Engagements	111
	Investigations or Legal Proceedings	112
	Noncompliance with Provisions of Laws, Regulations,	
	Contracts, and Grant Agreements	112
	Findings	113
	Audit Documentation	116
	Availability of Individuals and Documentation	117
Ac	dditional GAGAS Requirements for Reporting on Financial	
	Audits	118
	Reporting the Auditors' Compliance with GAGAS	118
	Reporting on Internal Control; Compliance with Provisions	
	of Laws, Regulations, Contracts, and Grant	
	Agreements; and Instances of Fraud	119
	Presenting Findings in the Audit Report	121
	Reporting Findings Directly to Parties outside the Audited	
	Entity	122
	Obtaining and Reporting the Views of Responsible Officials	123
	Reporting Confidential or Sensitive Information	125
	Distributing Reports	126

Chapter 7: Standards for Attestation Engagements and Reviews of Financial Statements	127
Examination Engagements	128
Compliance with Standards	128
Licensing and Certification	129
Auditor Communication	129
Results of Previous Engagements	130
Investigations or Legal Proceedings	130
Noncompliance with Provisions of Laws, Regulations,	
Contracts, and Grant Agreements	131
Findings	132
Examination Engagement Documentation	135
Availability of Individuals and Documentation	136
Reporting the Auditors' Compliance with GAGAS	136
Reporting Deficiencies in Internal Control	137
Reporting on Noncompliance with Provisions of Laws,	
Regulations, Contracts, and Grant Agreements or	
Instances of Fraud	138
Presenting Findings in the Report	139
Reporting Findings Directly to Parties outside the Audited	
Entity	139
Obtaining and Reporting the Views of Responsible Officials	140
Reporting Confidential or Sensitive Information	142
Distributing Reports	143
Review Engagements	144
Compliance with Standards	144
Licensing and Certification	144
Noncompliance with Provisions of Laws, Regulations,	4.45
Contracts, and Grant Agreements	145
Reporting Auditors' Compliance with GAGAS	145
Distributing Reports	146
Agreed-Upon Procedures Engagements	147
Compliance with Standards	147
Licensing and Certification Noncompliance with Provisions of Laws, Regulations,	147
Contracts, and Grant Agreements	148
Reporting Auditors' Compliance with GAGAS	148
Distributing Reports	149
Reviews of Financial Statements	150
Compliance with Standards	150
Licensing and Certification	150
Noncompliance with Provisions of Laws, Regulations,	100
Contracts, and Grant Agreements	151
Contracts, and Crant Agreements	101

	Reporting Auditors' Compliance with GAGAS	151
	Distributing Reports	152
Chapter 8: Fieldwork Standards for Perfo	rmance Audits	154
Plan	nning	154
	Auditor Communication	158
	Investigations or Legal Proceedings	159
	Results of Previous Engagements	160
	Assigning Auditors	160
	Preparing a Written Audit Plan	161
Con	ducting the Engagement	162
	Nature and Profile of the Program and User Needs Determining Significance and Obtaining an Understanding	162
	of Internal Control	165
	Assessing Internal Control	168
	Internal Control Deficiencies Considerations	169
	Information Systems Controls Considerations	171
	Provisions of Laws, Regulations, Contracts, and Grant	171
	Agreements Fraud	174 175
		175
	Identifying Sources of Evidence and the Amount and Type of Evidence Required	177
	Using the Work of Others	177
Sun	ervision	179
·	lence	179
EVIO	Overall Assessment of Evidence	185
	Findings	186
Aud	it Documentation	190
7.66	Availability of Individuals and Documentation	192
Chapter 9: Reporting Standards for Perfo	rmance Audits	194
Ren	orting Auditors' Compliance with GAGAS	194
·	ort Format	195
·	ort Content	195
·	Reporting Findings, Conclusions, and Recommendations	199
	Reporting on Internal Control	201
	Reporting on Noncompliance with Provisions of Laws,	
	Regulations, Contracts, and Grant Agreements	203
	Reporting on Instances of Fraud	204
	Reporting Findings Directly to Parties outside the Audited	
	Entity	204

	Obtaining the Views of Responsible Officials	206
	Report Distribution	207
	Reporting Confidential or Sensitive Information	208
	Discovery of Insufficient Evidence after Report Release	210
Glossary		211
Acknowledgments		222
	Comptroller General's Advisory Council on Government Auditing	
	Standards (2016-2020)	222
	GAO Project Team	223
	Staff Acknowledgments	223
Figures		
	Figure 1: Generally Accepted Government Auditing Standards	
	Conceptual Framework for Independence	61
	Figure 2: Independence Considerations for Preparing Accounting	
	Records and Financial Statements	62
	Figure 3: Developing Peer Review Communications for Observed	
	Matters in Accordance with Generally Accepted	400
	Government Auditing Standards	108
	Figure 4: Consideration of Internal Control in a Generally	
	Accepted Government Auditing Standards Performance	400
	Audit	193

Abbreviations

AICPA	American Institute of Certified Public Accountants
AR-C	AICPA Codification of Statements on Standards for
	Accounting and Review Services
AT-C	AICPA Codification of Statements on Standards for Attestation
	Engagements
AU-C	AICPA Codification of Statements on Auditing Standards
CPA	certified public accountant
CPE	continuing professional education
GAGAS	generally accepted government auditing standards
IAASB	International Auditing and Assurance Standards Board
IT	information technology
OMB	Office of Management and Budget
PCAOB	Public Company Accounting Oversight Board
SAS	Statements on Auditing Standards
SSAE	Statements on Standards for Attestation Engagements

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Comptroller General of the United States

Audits provide essential accountability and transparency over government programs. Given the current challenges facing governments and their programs, the oversight provided through auditing is more critical than ever. Government auditing provides the objective analysis and information needed to make the decisions necessary to help create a better future. The professional standards presented in this 2018 revision of *Government Auditing Standards* (known as the Yellow Book) provide a framework for performing high-quality audit work with competence, integrity, objectivity, and independence to provide accountability and to help improve government operations and services. These standards, commonly referred to as generally accepted government auditing standards (GAGAS), provide the foundation for government auditors to lead by example in the areas of independence, transparency, accountability, and quality through the audit process.

This revision contains major changes from, and supersedes, the 2011 revision. These changes, summarized below, reinforce the principles of transparency and accountability and strengthen the framework for high-quality government audits.

- All chapters are presented in a revised format that differentiates requirements and application guidance related to those requirements.
- Supplemental guidance from the appendix of the 2011 revision is either removed or incorporated into the individual chapters.
- The independence standard is expanded to state that preparing financial statements from a client-provided trial balance or underlying accounting records generally creates significant threats to auditors' independence, and auditors should document the threats and safeguards applied to eliminate and reduce threats to an acceptable level or decline to perform the service.
- The peer review standard is modified to require that audit organizations comply with their respective affiliated organization's peer review requirements and GAGAS peer review requirements. Additional requirements are provided for audit organizations not affiliated with recognized organizations.
- The standards include a definition for waste.
- The performance audit standards are updated with specific considerations for when internal control is significant to the audit objectives.

Effective with the implementation dates for the 2018 revision of Government Auditing Standards, GAO is also retiring Government Auditing Standards: Guidance on GAGAS Requirements for Continuing Professional Education (GAO-05-568G, April 2005) and Government Auditing Standards: Guidance for Understanding the New Peer Review Ratings (D06602, January 2014).

This revision of the standards has gone through an extensive deliberative process, including public comments and input from the Comptroller General's Advisory Council on Government Auditing Standards (Advisory Council). The Advisory Council consists of experts in financial and performance auditing and reporting from federal, state, and local government; the private sector; and academia. The views of all parties were thoroughly considered in finalizing the standards.

The 2018 revision of *Government Auditing Standards* is effective for financial audits, attestation engagements, and reviews of financial statements for periods ending on or after June 30, 2020, and for performance audits beginning on or after July 1, 2019. Early implementation is not permitted.

An electronic version of this document can be accessed at http://www.gao.gov/yellowbook.

I extend special thanks to the members of the Advisory Council for their extensive input and feedback throughout the process of developing and finalizing the standards.

Gene L. Dodaro

Comptroller General of the United States

Seve L. Dollans

July 2018

1.01 This chapter provides guidance for engagements conducted in accordance with generally accepted government auditing standards (GAGAS). This chapter also

- **a.** explains the types of auditors and audit organizations that may employ GAGAS to conduct their work,
- **b.** identifies the types of engagements that may be conducted in accordance with GAGAS, and
- **c.** explains terminology that is commonly used in GAGAS.

Introduction

- **1.02** The concept of accountability for use of public resources and government authority is key to our nation's governing processes. Management and officials entrusted with public resources are responsible for carrying out public functions and providing service to the public effectively, efficiently, economically, and ethically within the context of the statutory boundaries of the specific government program.
- **1.03** As reflected in applicable laws, regulations, agreements, and standards, management and officials of government programs are responsible for providing reliable, useful, and timely information for transparency and accountability of these programs and their operations. Legislators, oversight bodies, those charged with governance, and the public need to know whether (1) management and officials manage government resources and use their authority properly and in compliance with laws and regulations; (2) government programs are achieving their objectives and desired outcomes; and (3) government services are provided effectively, efficiently, economically, and ethically.
- **1.04** "Those charged with governance" refers to the individuals responsible for overseeing the strategic direction of the entity and obligations related to the accountability of the entity. This includes overseeing the financial reporting process, subject matter, or program under audit, including related internal controls. Those charged with governance may also be part of the entity's management. In some audited entities, multiple parties may be charged with governance, including oversight bodies, members or staff of legislative committees, boards of directors, audit committees, or parties contracting for the engagement.

- **1.05** Government auditing is essential in providing accountability to legislators, oversight bodies, those charged with governance, and the public. GAGAS engagements provide an independent, objective, nonpartisan assessment of the stewardship, performance, or cost of government policies, programs, or operations, depending upon the type and scope of the engagement.
- **1.06** The professional standards and guidance contained in this document provide a framework for conducting high-quality engagements with competence, integrity, objectivity, and independence. Auditors of government entities, entities that receive government awards, and other entities, as required by law or regulation or as they elect, may use these standards. Overall, GAGAS contains standards for engagements comprising individual requirements that are identified by terminology as discussed in paragraphs 2.02 through 2.10. GAGAS contains requirements and guidance dealing with ethics, independence, auditors' professional judgment and competence, quality control, peer review, conducting the engagement, and reporting.
- 1.07 Engagements conducted in accordance with GAGAS provide information used for oversight, accountability, transparency, and improvements of government programs and operations. GAGAS contains requirements and guidance to assist auditors in objectively obtaining and evaluating sufficient, appropriate evidence and reporting the results. When auditors conduct their work in this manner and comply with GAGAS in reporting the results, their work can lead to improved government management, better decision making and oversight, effective and efficient operations, and accountability and transparency for resources and results.
- **1.08** Laws, regulations, contracts, grant agreements, and policies frequently require that engagements be conducted in accordance with GAGAS. In addition, many auditors and audit organizations voluntarily choose to conduct their work in accordance with GAGAS. The requirements and guidance in GAGAS in totality apply to engagements pertaining to government entities, programs, activities, and functions, and to government assistance administered by contractors, nonprofit entities, and other nongovernmental entities when the use of GAGAS is required or voluntarily adopted.
- **1.09** The following are some of the laws, regulations, and other authoritative sources that require the use of GAGAS:

- a. The Inspector General Act of 1978, as amended (5 U.S.C. App.), requires that the federal inspectors general appointed under that act comply with GAGAS for audits of federal establishments, organizations, programs, activities, and functions. The act further states that the inspectors general shall take appropriate steps to assure that any work performed by nonfederal auditors complies with GAGAS.
- b. The Chief Financial Officers Act of 1990 (Public Law 101-576), as expanded by the Government Management Reform Act of 1994 (Public Law 103-356), requires that GAGAS be followed in audits of major executive branch departments' and agencies' financial statements. The Accountability of Tax Dollars Act of 2002 (Public Law 107-289) generally extends this requirement to most executive agencies not subject to the Chief Financial Officers Act.
- c. The Single Audit Act Amendments of 1996 (Public Law 104-156) requires that GAGAS be followed in audits of state and local governments and nonprofit entities that receive federal awards. Subpart F of OMB's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (2 C.F.R. part 200), which provides the government-wide guidelines and policies on conducting audits to comply with the Single Audit Act, reiterates the requirement to use GAGAS.
- **1.10** Other laws, regulations, or authoritative sources may require the use of GAGAS. For example, auditors at the state and local government levels may be required by state and local laws and regulations to follow GAGAS. Also, auditors may be required by the terms of an agreement or contract to follow GAGAS. Auditors may also be required to follow GAGAS by federal audit guidelines pertaining to program requirements. Being aware of such other laws, regulations, or authoritative sources may assist auditors in performing their work in accordance with the required standards.
- **1.11** Even if not required to do so, auditors may find it useful to follow GAGAS in conducting engagements pertaining to federal, state, and local government programs as well as engagements pertaining to state and local government awards that contractors, nonprofit entities, and other nongovernmental entities administer. Though not formally required to do so, many audit organizations, both in the United States and in other countries, voluntarily follow GAGAS.

Types of GAGAS Users

1.12 GAGAS provides standards that are used by a wide range of auditors and audit organizations that audit government entities, entities that receive government awards, and other entities. These auditors and audit organizations may also be subject to additional requirements unique to their environments. Examples of the various types of users who may be required or may elect to use GAGAS include the following:

- Contract auditors: audit organizations that specialize in conducting engagements pertaining to government acquisitions and contract administration
- b. Certified public accounting firms: public accounting organizations in the private sector that provide audit, attestation, or review services under contract to government entities or recipients of government funds
- c. Federal inspectors general: government audit organizations within federal agencies that conduct engagements and investigations relating to the programs and operations of their agencies and issue reports both to agency management and to third parties external to the audited entity
- d. Federal agency internal auditors: internal government audit organizations associated with federal agencies that conduct engagements and investigations relating to the programs and operations of their agencies
- **e.** Municipal auditors: elected or appointed officials in government audit organizations in the United States at the city, county, and other local government levels
- f. State auditors: elected or appointed officials in audit organizations in the governments of the 50 states, the District of Columbia, and the U.S. territories
- g. Supreme audit institutions: national government audit organizations, in the United States or elsewhere, typically headed by a comptroller general or auditor general

Types of GAGAS Engagements

- **1.13** This section describes the types of engagements that audit organizations may conduct in accordance with GAGAS. This description is not intended to limit or require the types of engagements that may be conducted in accordance with GAGAS.
- **1.14** All GAGAS engagements begin with objectives, and those objectives determine the type of engagement to be conducted and the applicable standards to be followed. This document classifies financial audits, attestation engagements, reviews of financial statements, and performance audits, as defined by their objectives, as the types of engagements that are covered by GAGAS.
- **1.15** In some GAGAS engagements, the standards applicable to the specific objective will be apparent. For example, if the objective is to express an opinion on financial statements, the standards for financial audits apply. However, some engagements may have objectives that could be met using more than one approach. For example, if the objective is to determine the reliability of performance measures, auditors can perform this work in accordance with either the standards for attestation engagements or performance audits.
- **1.16** GAGAS requirements and guidance apply to the types of engagements that auditors may conduct in accordance with GAGAS as follows:
 - **a.** Financial audits: the requirements and guidance in chapters 1 through 6 apply.
 - **b.** Attestation-level examination, review, and agreed-upon procedures engagements and reviews of financial statements: the requirements and guidance in chapters 1 through 5 and 7 apply.
 - **c.** Performance audits: the requirements and guidance in chapters 1 through 5, 8, and 9 apply.

Financial Audits

1.17 Financial audits provide independent assessments of whether entities' reported financial information (e.g., financial condition, results, and use of resources) is presented fairly, in all material respects, in accordance with recognized criteria. Financial audits conducted in accordance with GAGAS include financial statement audits and other related financial audits.

- a. Financial statement audits: The primary purpose of a financial statement audit is to provide financial statement users with an opinion by an auditor on whether an entity's financial statements are presented fairly, in all material respects, in accordance with an applicable financial reporting framework. Reporting on financial statement audits conducted in accordance with GAGAS also includes reports on internal control over financial reporting and on compliance with provisions of laws, regulations, contracts, and grant agreements that have a material effect on the financial statements.
- Other types of financial audits: Other types of financial audits conducted in accordance with GAGAS entail various scopes of work, including
 - (1) obtaining sufficient, appropriate evidence to form an opinion on a single financial statement or specified elements, accounts, or line items of a financial statement;¹
 - (2) issuing letters (commonly referred to as comfort letters) for underwriters and certain other requesting parties;²
 - (3) auditing applicable compliance and internal control requirements relating to one or more government programs;³ and
 - (4) conducting an audit of internal control over financial reporting that is integrated with an audit of financial statements (integrated audit).⁴

¹See AU-C section 805, Special Considerations – Audits of Single Financial Statements and Specific Elements, Accounts, or Items of a Financial Statement (AICPA, Professional Standards).

²See AU-C section 920, Letters for Underwriters and Certain Other Requesting Parties (AICPA, Professional Standards).

³See AU-C section 935, Compliance Audits (AICPA, Professional Standards).

⁴See AU-C section 940, *An Audit of Internal Control Over Financial Reporting That Is Integrated With an Audit of Financial Statements* (AICPA, *Professional Standards*).

Attestation Engagements and Reviews of Financial Statements

- **1.18** Attestation engagements can cover a broad range of financial or nonfinancial objectives about the subject matter or assertion depending on the users' needs. In an attestation engagement, the subject matter or an assertion by a party other than the auditors is measured or evaluated in accordance with suitable criteria. The work the auditors perform and the level of assurance associated with the report vary based on the type of attestation engagement. The three types of attestation engagements are as follows:
 - a. Examination: An auditor obtains reasonable assurance by obtaining sufficient, appropriate evidence about the measurement or evaluation of subject matter against criteria in order to be able to draw reasonable conclusions on which to base the auditor's opinion about whether the subject matter is in accordance with (or based on) the criteria or the assertion is fairly stated, in all material respects. The auditor obtains the same level of assurance in an examination as in a financial statement audit.⁵
 - b. Review: An auditor obtains limited assurance by obtaining sufficient, appropriate review evidence about the measurement or evaluation of subject matter against criteria in order to express a conclusion about whether any material modification should be made to the subject matter in order for it to be in accordance with (or based on) the criteria or to the assertion in order for it to be fairly stated. Review-level work does not include reporting on internal control or compliance with provisions of laws, regulations, contracts, and grant agreements. The auditor obtains the same level of assurance in a review engagement as in a review of financial statements.⁶
 - c. Agreed-upon procedures engagement: An auditor performs specific procedures on subject matter or an assertion and reports the findings without providing an opinion or a conclusion on it. The specified parties to the engagement agree upon and are responsible for the sufficiency of the procedures for their

⁵See AT-C section 205, Examination Engagements (AICPA, Professional Standards).

⁶See AT-C section 210, *Review Engagements* (AICPA, *Professional Standards*).

purposes. The specified parties are the intended users to whom use of the report is limited.⁷

- **1.19** The subject matter of an attestation engagement may take many forms, including the following:
 - a. historical or prospective performance or condition, historical or prospective financial information, performance measurements, or backlog data;
 - **b.** physical characteristics, for example, narrative descriptions or square footage of facilities;
 - **c.** historical events, for example, the price of a market basket of goods on a certain date;
 - **d.** analyses, for example, break-even analyses;
 - e. systems and processes, for example, internal control; and
 - **f.** behavior, for example, corporate governance, compliance with laws and regulations, and human resource practices.
- **1.20** The objective of the auditor when performing a review of financial statements is to obtain limited assurance as a basis for reporting whether the auditor is aware of any material modifications that should be made to financial statements in order for the financial statements to be in accordance with the applicable financial reporting framework. A review of financial statements does not include obtaining an understanding of the entity's internal control, assessing fraud risk, or certain other procedures ordinarily performed in an audit.⁸

Performance Audits

1.21 Performance audits provide objective analysis, findings, and conclusions to assist management and those charged with governance and oversight with, among other things, improving program performance and operations, reducing costs, facilitating decision making by parties

⁷See AT-C section 215, *Agreed-Upon Procedures Engagements* (AICPA, *Professional Standards*).

⁸See AR-C section 90, Review of Financial Statements (AICPA, Professional Standards).

responsible for overseeing or initiating corrective action, and contributing to public accountability.

- **1.22** Performance audit objectives vary widely and include assessments of program effectiveness, economy, and efficiency; internal control; compliance; and prospective analyses. Audit objectives may also pertain to the current status or condition of a program. These overall objectives are not mutually exclusive. For example, a performance audit with an objective of determining or evaluating program effectiveness may also involve an additional objective of evaluating the program's internal controls. Key categories of performance audit objectives include the following:
 - a. Program effectiveness and results audit objectives. These are frequently interrelated with economy and efficiency objectives. Audit objectives that focus on program effectiveness and results typically measure the extent to which a program is achieving its goals and objectives. Audit objectives that focus on economy and efficiency address the costs and resources used to achieve program results.
 - b. Internal control audit objectives. These relate to an assessment of one or more aspects of an entity's system of internal control that is designed to provide reasonable assurance of achieving effective and efficient operations, reliability of reporting for internal and external use, or compliance with provisions of applicable laws and regulations. Internal control objectives also may be relevant when determining the cause of unsatisfactory program performance. Internal control is a process effected by an entity's oversight body, management, and other personnel that provides reasonable assurance that the objectives of an entity will be achieved. Internal control comprises the plans, methods, policies, and procedures used to fulfill the mission, strategic plan, goals, and objectives of the entity.
 - c. Compliance audit objectives. These relate to an assessment of compliance with criteria established by provisions of laws, regulations, contracts, and grant agreements, or other requirements that could affect the acquisition, protection, use, and disposition of the entity's resources and the quantity, quality, timeliness, and cost of services the entity produces and delivers. Compliance requirements can be either financial or nonfinancial.

- **d.** Prospective analysis audit objectives. These provide analysis or conclusions about information that is based on assumptions about events that may occur in the future, along with possible actions that the entity may take in response to the future events.
- **1.23** Examples of program effectiveness and results audit objectives include
 - **a.** assessing the extent to which legislative, regulatory, or organizational goals and objectives are being achieved;
 - assessing the relative ability of alternative approaches to yield better program performance or eliminate factors that inhibit program effectiveness;
 - **c.** analyzing the relative cost-effectiveness of a program or activity, focusing on combining cost information or other inputs with
 - (1) information about outputs or the benefit provided or
 - (2) outcomes or the results achieved;
 - d. determining whether a program produced intended results or produced results that were not consistent with the program's objectives;
 - **e.** determining the current status or condition of program operations or progress in implementing legislative requirements;
 - **f.** determining whether a program provides access to or distribution of public resources within the context of statutory parameters;
 - **g.** assessing the extent to which programs duplicate, overlap, or conflict with other related programs;
 - **h.** evaluating whether the entity is following sound procurement practices;
 - assessing the reliability, validity, or relevance of performance measures concerning program effectiveness and results or economy and efficiency;
 - **j.** assessing the reliability, validity, or relevance of financial information related to the performance of a program;

- determining whether government resources (inputs) are obtained at reasonable costs while meeting timeliness and quality considerations;
- determining whether appropriate value was obtained based on the cost or amount paid or based on the amount of revenue received;
- m. determining whether government services and benefits are accessible to those individuals who have a right to access those services and benefits:
- **n.** determining whether fees assessed cover costs;
- determining whether and how the program's unit costs can be decreased or its productivity increased; and
- **p.** assessing the reliability, validity, or relevance of budget proposals or budget requests to assist legislatures in the budget process.
- **1.24** Examples of internal control audit objectives include determining whether
 - **a.** organizational missions, goals, and objectives are achieved effectively and efficiently;
 - **b.** resources are used in compliance with laws, regulations, or other requirements;
 - resources, including sensitive information accessed or stored outside the organization's physical perimeter, are safeguarded against unauthorized acquisition, use, or disposition;
 - management information, such as performance measures, and public reports are complete, accurate, and consistent to support performance and decision making;
 - **e.** the integrity of information from computerized systems is achieved; and
 - f. contingency planning for information systems provides essential backup to prevent unwarranted disruption of the activities and functions that the systems support.

- **1.25** Examples of compliance objectives include determining whether
 - a. the purpose of the program, the manner in which it is to be conducted, the services delivered, the outcomes, or the population it serves is in compliance with provisions of laws, regulations, contracts, or grant agreements or other requirements;
 - **b.** government services and benefits are distributed or delivered to citizens based on eligibility to obtain those services and benefits;
 - **c.** incurred or proposed costs are in compliance with applicable laws, regulations, contracts, or grant agreements; and
 - **d.** revenues received are in compliance with applicable laws, regulations, contracts, or grant agreements.
- **1.26** Examples of prospective analysis objectives include providing conclusions based on
 - a. current and projected trends and future potential impact on government programs and services and their implications for program or policy alternatives;
 - **b.** program or policy alternatives, including forecasting program outcomes under various assumptions;
 - **c.** policy or legislative proposals, including advantages, disadvantages, and analysis of stakeholder views;
 - **d.** prospective information prepared by management;
 - e. budgets and forecasts that are based on (1) assumptions about expected future events and (2) stakeholders' and management's expected reaction to those future events; and
 - **f.** management's assumptions on which prospective information is based.

Terms Used in GAGAS

1.27 This paragraph describes certain terms used in GAGAS. When terminology differs from that used at an organization subject to GAGAS, auditors use professional judgment to determine if there is an equivalent term.⁹

- a. Attestation engagement: An examination, review, or agreed-upon procedures engagement conducted under the GAGAS attestation standards related to subject matter or an assertion that is the responsibility of another party.
- **b.** Audit: Either a financial audit or performance audit conducted in accordance with GAGAS.
- **c.** Audit organization: A government audit entity or a public accounting firm or other audit entity that conducts GAGAS engagements.
- **d.** Audit report: A report issued as a result of a financial audit, attestation engagement, review of financial statements, or performance audit conducted in accordance with GAGAS.
- **e.** Audited entity: The entity that is subject to a GAGAS engagement, whether that engagement is a financial audit, attestation engagement, review of financial statements, or performance audit.
- **f.** Auditor: An individual assigned to planning, directing, performing engagement procedures, or reporting on GAGAS engagements (including work on audits, attestation engagements, and reviews of financial statements) regardless of job title. Therefore, individuals who may have the title auditor, information technology auditor, analyst, practitioner, evaluator, inspector, or other similar titles are considered auditors under GAGAS.
- g. Control objective: The aim or purpose of specified controls; control objectives address the risks related to achieving an entity's objectives.

⁹See the Glossary for an expanded list of terms used in GAGAS.

- **h.** Engagement: A financial audit, attestation engagement, review of financial statements, or performance audit conducted in accordance with GAGAS.
- Engagement team (or audit team): Auditors assigned to planning, directing, performing engagement procedures, or reporting on GAGAS engagements.
- **j.** Engaging party: The party that engages the auditor to conduct the GAGAS engagement.
- **k.** Entity objective: What an entity wants to achieve; entity objectives are intended to meet the entity's mission, strategic plan, and goals and the requirements of applicable laws and regulations.
- I. External audit organization: An audit organization that issues reports to third parties external to the audited entity, either exclusively or in addition to issuing reports to senior management and those charged with governance of the audited entity.
- m. Internal audit organization: An audit organization that is accountable to senior management and those charged with governance of the audited entity and that does not generally issue reports to third parties external to the audited entity.
- **n.** Responsible party: The party responsible for a GAGAS engagement's subject matter.
- **o.** Review of financial statements: An engagement conducted under GAGAS for review of financial statements.
- p. Specialist: An individual or organization possessing special skill or knowledge in a particular field other than accounting or auditing that assists auditors in conducting engagements. A specialist may be either an internal specialist or an external specialist.

The GAGAS Format

1.28 GAGAS uses a format designed to allow auditors to quickly identify requirements and application guidance related to those requirements. GAGAS requirements are differentiated from application guidance by borders surrounding the text. The requirements are followed immediately by application guidance that relates directly to the preceding



Chapter 2: General Requirements for Complying with Government Auditing Standards

2.01 This chapter establishes general requirements for complying with generally accepted government auditing standards (GAGAS) that are applicable to all GAGAS engagements. The information it contains relates to how auditors conducting GAGAS engagements identify and apply the requirements contained in GAGAS. The chapter also contains requirements for using other audit standards in conjunction with GAGAS and for reporting compliance with GAGAS in the audit report.

Complying with GAGAS

Requirements: Complying with GAGAS

- **2.02** GAGAS uses two categories of requirements, identified by specific terms, to describe the degree of responsibility they impose on auditors and audit organizations:
 - a. Unconditional requirements: Auditors and audit organizations must comply with an unconditional requirement in all cases where such requirement is relevant. GAGAS uses *must* to indicate an unconditional requirement.
 - b. Presumptively mandatory requirements: Auditors and audit organizations must comply with a presumptively mandatory requirement in all cases where such a requirement is relevant except in rare circumstances discussed in paragraphs 2.03, 2.04, and 2.08. GAGAS uses should to indicate a presumptively mandatory requirement.¹⁰
- **2.03** In rare circumstances, auditors and audit organizations may determine it necessary to depart from a relevant presumptively mandatory requirement. In such rare circumstances, auditors should perform alternative procedures to achieve the intent of that requirement.
- **2.04** If, in rare circumstances, auditors judge it necessary to depart from a relevant presumptively mandatory requirement, they must document their justification for the departure and how the alternative

 $^{^{10}}$ See para. 2.19 for additional documentation requirements for departures from GAGAS requirements.

Chapter 2: General Requirements for Complying with Government Auditing Standards

procedures performed in the circumstances were sufficient to achieve the intent of that requirement.

- **2.05** Auditors should have an understanding of the entire text of applicable chapters of GAGAS, including application guidance, and any amendments that GAO issued, to understand the intent of the requirements and to apply the requirements properly.¹¹
- **2.06** Auditors should consider applicable GAO-issued GAGAS interpretive guidance in conducting and reporting on GAGAS engagements. ¹²

Application Guidance: Complying with GAGAS

- **2.07** GAGAS contains requirements together with related explanatory material in the form of application guidance. Not every paragraph of GAGAS carries a requirement. Rather, GAGAS identifies the requirements through use of specific language. GAGAS also contains introductory material that provides context relevant to a proper understanding of a GAGAS chapter or section. Having an understanding of the entire text of applicable GAGAS includes an understanding of any financial audit, attestation, and reviews of financial statement standards incorporated by reference.¹³
- **2.08** The need for auditors to depart from a relevant presumptively mandatory requirement is expected to arise only when the requirement is for a specific procedure to be performed and, in the specific circumstances of the engagement, that procedure would be ineffective in achieving the intent of the requirement.
- **2.09** The application guidance provides further explanation of the requirements and guidance for applying them. In particular, it may explain more precisely what a requirement means or is intended to address or include examples of procedures that may be appropriate in the circumstances. Although such guidance does not in itself impose a

¹¹See http://www.gao.gov/yellowbook for GAGAS amendments.

¹²See http://www.gao.gov/yellowbook for GAGAS interpretive guidance.

¹³See paras. 2.13, 6.01, and 7.01 for discussion of standards incorporated by reference.

requirement, it is relevant to the proper application of the requirements. "May," "might," and "could" are used to describe these actions and procedures. The application guidance may also provide background information on matters addressed in GAGAS.

2.10 Interpretive guidance is not auditing standards. Interpretive guidance provides guidance on the application of GAGAS and recommendations on the application of GAGAS in specific circumstances.

Relationship between GAGAS and Other Professional Standards

Requirement: Relationship between GAGAS and Other Professional Standards

2.11 When auditors cite compliance with both GAGAS and another set of standards, such as those listed in paragraphs 2.13, 2.15, 6.01, and 7.01, auditors should refer to paragraph 2.17 for the requirements for citing compliance with GAGAS. In addition to citing GAGAS, auditors may also cite the use of other standards in their reports when they have also met the requirements for citing compliance with the other standards. Auditors should refer to the other set of standards for the basis for citing compliance with those standards.

Application Guidance: Relationship between GAGAS and Other Professional Standards

- **2.12** Auditors may use GAGAS in conjunction with professional standards issued by other authoritative bodies.
- **2.13** The relationship between GAGAS and other professional standards for financial audits, attestation engagements, and reviews of financial statements is as follows:
 - a. The American Institute of Certified Public Accountants (AICPA) has established professional standards that apply to financial audits, attestation engagements, and reviews of financial statements for nonissuers (entities other than issuers under the Sarbanes-Oxley Act of 2002,¹⁴ such as privately held companies,

¹⁴See the Sarbanes-Oxley Act of 2002 (Public Law 107-204) for a discussion of issuers (generally, publicly traded companies with a reporting obligation under the Securities Exchange Act of 1934).

nonprofit entities, and government entities) conducted by certified public accountants (CPA). For financial audits and attestation engagements, GAGAS incorporates by reference AICPA Statements on Auditing Standards and Statements on Standards for Attestation Engagements. ¹⁵ For reviews of financial statements, GAGAS incorporates by reference AR-C, section 90, *Review of Financial Statements*. ¹⁶

- b. The International Auditing and Assurance Standards Board (IAASB) has established professional standards that apply to financial audits and assurance engagements. Auditors may elect to use the IAASB standards and the related International Standards on Auditing and International Standards on Assurance Engagements in conjunction with GAGAS.
- c. The Public Company Accounting Oversight Board (PCAOB) has established professional standards that apply to financial audits and attestation engagements for issuers. Auditors may elect to use the PCAOB standards in conjunction with GAGAS.
- **2.14** For financial audits, attestation engagements, and reviews of financial statements, GAGAS does not incorporate the AICPA Code of Professional Conduct by reference, but recognizes that certain CPAs may use or may be required to use the code in conjunction with GAGAS.
- **2.15** For performance audits, GAGAS does not incorporate other standards by reference, but recognizes that auditors may use or may be required to use other professional standards in conjunction with GAGAS, such as the following:
 - **a.** International Standards for the Professional Practice of Internal Auditing, Institute of Internal Auditors, Inc.;
 - **b.** *International Standards of Supreme Audit Institutions*, International Organization of Supreme Audit Institutions;
 - **c.** *Guiding Principles for Evaluators*, American Evaluation Association:

¹⁵AICPA, *Professional Standards*.

¹⁶AICPA, Professional Standards.

- **d.** *The Program Evaluation Standards*, Joint Committee on Standards for Education Evaluation;
- **e.** Standards for Educational and Psychological Testing, American Psychological Association; and
- **f.** IT Standards, Guidelines, and Tools and Techniques for Audit and Assurance and Control Professionals, Information Systems Audit and Control Association.

Stating Compliance with GAGAS in the Audit Report

Requirements: Stating Compliance with GAGAS in the Audit Report

- **2.16** When auditors are required to conduct an engagement in accordance with GAGAS or are representing to others that they did so, they should cite compliance with GAGAS in the audit report as set forth in paragraphs 2.17 through 2.19.
- **2.17** Auditors should include one of the following types of GAGAS compliance statements in reports on GAGAS engagements, as appropriate.
 - a. Unmodified GAGAS compliance statement: Stating that the auditors conducted the engagement in accordance with GAGAS. Auditors should include an unmodified GAGAS compliance statement in the audit report when they have (1) followed unconditional and applicable presumptively mandatory GAGAS requirements or (2) followed unconditional requirements, documented justification for any departures from applicable presumptively mandatory requirements, and achieved the objectives of those requirements through other means.
 - **b.** Modified GAGAS compliance statement: Stating either that
 - (1) the auditors conducted the engagement in accordance with GAGAS, except for specific applicable requirements that were not followed, or
 - (2) because of the significance of the departure(s) from the

requirements, the auditors were unable to and did not conduct the engagement in accordance with GAGAS.

- **2.18** When auditors use a modified GAGAS statement, they should disclose in the report the applicable requirement(s) not followed, the reasons for not following the requirement(s), and how not following the requirement(s) affected or could have affected the engagement and the assurance provided.
- **2.19** When auditors do not comply with applicable requirement(s), they should (1) assess the significance of the noncompliance to the engagement objectives; (2) document the assessment, along with their reasons for not following the requirement(s); and (3) determine the type of GAGAS compliance statement.

Application Guidance: Stating Compliance with GAGAS in the Audit Report

- **2.20** Situations for using modified compliance statements include scope limitations, such as restrictions on access to records, government officials, or other individuals needed to conduct the engagement.
- **2.21** The auditors' determination of noncompliance with applicable requirements is a matter of professional judgment, which is affected by the significance of the requirement(s) not followed in relation to the engagement objectives.
- **2.22** Determining whether an unmodified or modified GAGAS compliance statement is appropriate is based on the consideration of the individual and aggregate effect of the instances of noncompliance with GAGAS requirements. Factors that the auditor may consider include
 - **a.** the pervasiveness of the instance(s) of noncompliance;
 - **b.** the potential effect of the instance(s) of noncompliance on the sufficiency and appropriateness of evidence supporting the findings, conclusions, and recommendations; and
 - **c.** whether report users might misunderstand the implications of a modified or unmodified GAGAS compliance statement.

2.23 If an audit report is issued in situations described in paragraph 3.60 (except in circumstances discussed in paragraphs 3.25 or 3.84), a modified GAGAS compliance statement as discussed in paragraph 2.17b(2) is used.

Chapter 3: Ethics, Independence, and Professional Judgment

3.01 The first section of this chapter sets forth fundamental ethical principles for auditors in the government environment. The second section establishes independence standards and provides guidance on this topic for auditors conducting financial audits, attestation engagements, reviews of financial statements, and performance audits under generally accepted government auditing standards (GAGAS). This section emphasizes the importance of independence of the auditor and the audit organization. The third section establishes the standard for the auditor's use of professional judgment and provides related application guidance. The requirements of this chapter are intended to be followed in conjunction with all other applicable GAGAS requirements.

Ethical Principles

- **3.02** The ethical principles presented in this section provide the foundation, discipline, and structure, as well as the environment, that influence the application of GAGAS.¹⁷
- 3.03 Because auditing is essential to government accountability to the public, the public expects audit organizations and auditors who perform their work in accordance with GAGAS to follow ethical principles. Management of the audit organization sets the tone for ethical behavior throughout the organization by maintaining an ethical culture, clearly communicating acceptable behavior and expectations to each employee, and creating an environment that reinforces and encourages ethical behavior throughout all levels of the organization. The ethical tone maintained and demonstrated by management and personnel is an essential element of a positive ethical environment for the audit organization.
- **3.04** Performing audit work in accordance with ethical principles is a matter of personal and organizational responsibility. Ethical principles apply in preserving auditor independence, ¹⁸ taking on only work that the audit organization is competent to perform, ¹⁹ performing high-quality work, and following the applicable standards cited in the audit report. Integrity and objectivity are maintained when auditors perform their work

¹⁷See para. 5.08 for a discussion of ethical requirements in an audit organization's system of quality control.

¹⁸See paras. 3.18 through 3.108 for requirements and guidance related to independence.

¹⁹See paras. 4.02 through 4.15 for additional information on competence.

Chapter 3: Ethics, Independence, and Professional Judgment

and make decisions that are consistent with the broader interest of those relying on the audit report, including the public.

- **3.05** Other ethical requirements or codes of professional conduct may also be applicable to auditors who conduct engagements in accordance with GAGAS. For example, individual auditors who are members of professional organizations or are licensed or certified professionals may also be subject to ethical requirements of those professional organizations or licensing bodies. Auditors employed by government entities may also be subject to government ethics laws and regulations.
- **3.06** The ethical principles that guide the work of auditors who conduct engagements in accordance with GAGAS are
 - a. the public interest;
 - **b.** integrity;
 - c. objectivity;
 - **d.** proper use of government information, resources, and positions; and
 - e. professional behavior.

The Public Interest

- **3.07** The public interest is defined as the collective well-being of the community of people and entities that the auditors serve. Observing integrity, objectivity, and independence in discharging their professional responsibilities helps auditors serve the public interest and honor the public trust. The principle of the public interest is fundamental to the responsibilities of auditors and critical in the government environment.
- **3.08** A distinguishing mark of an auditor is acceptance of responsibility to serve the public interest. This responsibility is critical when auditing in the government environment. GAGAS embodies the concept of accountability for public resources, which is fundamental to serving the public interest.

Integrity

3.09 Public confidence in government is maintained and strengthened by auditors performing their professional responsibilities with integrity. Integrity includes auditors performing their work with an attitude that is objective, fact-based, nonpartisan, and nonideological with regard to

audited entities and users of the audit reports. Within the constraints of applicable confidentiality laws, regulations, or policies, communications with the audited entity, those charged with governance, and the individuals contracting for or requesting the engagement are expected to be honest, candid, and constructive.

3.10 Making decisions consistent with the public interest of the program or activity under audit is an important part of the principle of integrity. In discharging their professional responsibilities, auditors may encounter conflicting pressures from management of the audited entity, various levels of government, and other likely users. Auditors may also encounter pressures to inappropriately achieve personal or organizational gain. In resolving those conflicts and pressures, acting with integrity means that auditors place priority on their responsibilities to the public interest.

Objectivity

3.11 Auditors' objectivity in discharging their professional responsibilities is the basis for the credibility of auditing in the government sector. Objectivity includes independence of mind and appearance when conducting engagements, maintaining an attitude of impartiality, having intellectual honesty, and being free of conflicts of interest. Maintaining objectivity includes a continuing assessment of relationships with audited entities and other stakeholders in the context of the auditors' responsibility to the public. The concepts of objectivity and independence are closely related. Independence impairments affect auditors' objectivity.²⁰

Proper Use of Government Information, Resources, and Positions

- **3.12** Government information, resources, and positions are to be used for official purposes and not inappropriately for the auditors' personal gain or in a manner contrary to law or detrimental to the legitimate interests of the audited entity or the audit organization. This concept includes the proper handling of sensitive or classified information or resources.
- **3.13** In the government environment, the public's right to the transparency of government information has to be balanced with the proper use of that information. In addition, many government programs are subject to laws and regulations dealing with the disclosure of information. Exercising discretion in using information acquired in the course of auditors' duties is

²⁰See paras. 3.18 through 3.108 for independence requirements and guidance.

Chapter 3: Ethics, Independence, and Professional Judgment

an important part in achieving this balance. Improperly disclosing any such information to third parties is not an acceptable practice.

- **3.14** Accountability to the public for the proper use and prudent management of government resources is an essential part of auditors' responsibilities. Protecting and conserving government resources and using them appropriately for authorized activities are important elements of the public's expectations for auditors.
- **3.15** Misusing the auditor position for financial gain or other benefits violates an auditor's fundamental responsibilities. An auditor's credibility can be damaged by actions that could be perceived by an objective third party with knowledge of the relevant information as improperly benefiting an auditor's personal financial interests or those of an immediate or close family member; a general partner; an entity for which the auditor serves as an officer, director, trustee, or employee; or an entity with which the auditor is negotiating concerning future employment.

Professional Behavior

3.16 High expectations for the auditing profession include complying with all relevant legal, regulatory, and professional obligations and avoiding any conduct that could bring discredit to auditors' work, including actions that would cause an objective third party with knowledge of the relevant information to conclude that the auditors' work was professionally deficient. Professional behavior includes auditors putting forth an honest effort in performing their duties in accordance with the relevant technical and professional standards.

Independence

- **3.17** GAGAS's practical consideration of independence consists of four interrelated sections, providing
 - **a.** general requirements and application guidance;
 - requirements for and guidance on a conceptual framework for making independence determinations based on facts and circumstances that are often unique to specific environments;
 - c. requirements for and guidance on independence for auditors providing nonaudit services, including identification of specific nonaudit services that always impair independence and others that would not normally impair independence; and

d. requirements for and guidance on documentation necessary to support adequate consideration of auditor independence.

Requirements: General

- **3.18** In all matters relating to the GAGAS engagement, auditors and audit organizations must be independent from an audited entity.
- **3.19** Auditors and audit organizations should avoid situations that could lead reasonable and informed third parties to conclude that the auditors and audit organizations are not independent and thus are not capable of exercising objective and impartial judgment on all issues associated with conducting the engagement and reporting on the work.
- **3.20** Except under the limited circumstances discussed in paragraphs 3.66 and 3.67, auditors and audit organizations should be independent from an audited entity during
 - **a.** any period of time that falls within the period covered by the financial statements or subject matter of the engagement and
 - **b.** the period of professional engagement.

Application Guidance: General

- **3.21** Independence comprises the following:
 - a. Independence of mind: The state of mind that permits the conduct of an engagement without being affected by influences that compromise professional judgment, thereby allowing an individual to act with integrity and exercise objectivity and professional skepticism.
 - b. Independence in appearance: The absence of circumstances that would cause a reasonable and informed third party to reasonably conclude that the integrity, objectivity, or professional skepticism of an audit organization or member of the engagement team had been compromised.
- **3.22** Auditors and audit organizations maintain their independence so that their opinions, findings, conclusions, judgments, and recommendations

Chapter 3: Ethics, Independence, and Professional Judgment

will be impartial and will be viewed as impartial by reasonable and informed third parties.

- **3.23** The period of professional engagement begins when the auditors either sign an initial engagement letter or other agreement to conduct an engagement or begin to conduct an engagement, whichever is earlier. The period lasts for the duration of the professional relationship—which, for recurring engagements, could cover many periods—and ends with the formal or informal notification, either by the auditors or the audited entity, of the termination of the professional relationship or with the issuance of a report, whichever is later. Accordingly, the period of professional engagement does not necessarily end with the issuance of a report and recommence with the beginning of the following year's engagement or a subsequent engagement with a similar objective.
- **3.24** Under some conditions, the party requesting or requiring an engagement, referred to as the engaging party, will differ from the party responsible for the engagement's subject matter, referred to as the responsible party. Under such conditions, the GAGAS independence requirements apply to the relationship between the auditors and the responsible party, not the relationship between the auditors and the engaging party. The following are examples of conditions under which the party requesting an engagement may differ from the party responsible for the engagement's subject matter.
 - a. A legislative body requires that auditors conduct, on the legislative body's behalf, a performance audit of program operations that are the responsibility of an executive agency. GAGAS requires that the auditors be independent of the executive agency.
 - b. A state agency engages an independent public accountant to conduct an examination-level attestation engagement to assess the validity of certain information that a local government provided to the state agency. GAGAS requires that the independent public accountant be independent of the local government.
 - c. A government department works with a government agency that conducts examination-level attestation engagements of contractor compliance with the terms and conditions of agreements between the department and the contractor. GAGAS requires that the auditors be independent of the contractors.

3.25 Auditors in government sometimes work under conditions that impair independence in accordance with this section. An example of such a circumstance is a threat created by a statutory requirement for auditors to serve in official roles that conflict with the independence requirements of this section, such as a law that requires an auditor to serve as a voting member of an entity's management committee or board of directors, for which there are no safeguards to eliminate or reduce the threats to an acceptable level. Paragraph 2.17b provides standard language for modified GAGAS compliance statements for auditors who experience such impairments. Determining how to modify the GAGAS compliance statement in these circumstances is a matter of professional judgment.

GAGAS Conceptual Framework Approach to Independence

3.26 Many different circumstances, or combinations of circumstances, are relevant in evaluating threats to independence. Therefore, GAGAS establishes a conceptual framework that auditors use to identify, evaluate, and apply safeguards to address threats to independence. The conceptual framework assists auditors in maintaining both independence of mind and independence in appearance. It can be applied to many variations in circumstances that create threats to independence and allows auditors to address threats to independence that result from activities that are not specifically prohibited by GAGAS.

Requirements: GAGAS Conceptual Framework Approach to Independence

- **3.27** Auditors should apply the conceptual framework²¹ at the audit organization, engagement team, and individual auditor levels to
 - **a.** identify threats to independence;
 - **b.** evaluate the significance of the threats identified, both individually and in the aggregate; and
 - **c.** apply safeguards as necessary to eliminate the threats or reduce them to an acceptable level.
- 3.28 Auditors should reevaluate threats to independence, including

²¹See fig. 1 at the end of ch. 3 for a flowchart on applying the conceptual framework in accordance with GAGAS.

any safeguards applied, whenever the audit organization or the auditors become aware of new information or changes in facts and circumstances that could affect whether a threat has been eliminated or reduced to an acceptable level.

- **3.29** Auditors should use professional judgment when applying the conceptual framework.
- **3.30** Auditors should evaluate the following broad categories of threats to independence when applying the GAGAS conceptual framework:
 - **a.** Self-interest threat: The threat that a financial or other interest will inappropriately influence an auditor's judgment or behavior.
 - b. Self-review threat: The threat that an auditor or audit organization that has provided nonaudit services will not appropriately evaluate the results of previous judgments made or services provided as part of the nonaudit services when forming a judgment significant to a GAGAS engagement.
 - **c.** Bias threat: The threat that an auditor will, as a result of political, ideological, social, or other convictions, take a position that is not objective.
 - d. Familiarity threat: The threat that aspects of a relationship with management or personnel of an audited entity, such as a close or long relationship, or that of an immediate or close family member, will lead an auditor to take a position that is not objective.
 - **e.** Undue influence threat: The threat that influences or pressures from sources external to the audit organization will affect an auditor's ability to make objective judgments.
 - f. Management participation threat: The threat that results from an auditor's taking on the role of management or otherwise performing management functions on behalf of the audited entity, which will lead an auditor to take a position that is not objective.
 - **g.** Structural threat: The threat that an audit organization's placement within a government entity, in combination with the

structure of the government entity being audited, will affect the audit organization's ability to perform work and report results objectively.

- **3.31** Auditors should determine whether identified threats to independence are at an acceptable level or have been eliminated or reduced to an acceptable level, considering both qualitative and quantitative factors to determine the significance of a threat.
- **3.32** When auditors determine that threats to independence are not at an acceptable level, the auditors should determine whether appropriate safeguards can be applied to eliminate the threats or reduce them to an acceptable level.
- **3.33** In cases where auditors determine that threats to independence require the application of safeguards, auditors should document the threats identified and the safeguards applied to eliminate or reduce the threats to an acceptable level.
- **3.34** If auditors initially identify a threat to independence after the audit report is issued, auditors should evaluate the threat's effect on the engagement and on GAGAS compliance. If the auditors determine that the newly identified threat's effect on the engagement would have resulted in the audit report being different from the report issued had the auditors been aware of it, they should communicate in the same manner as that used to originally distribute the report to those charged with governance, the appropriate officials of the audited entity, the appropriate officials of the audit organization requiring or arranging for the engagements, and other known users, so that they do not continue to rely on findings or conclusions that were affected by the threat to independence. If auditors previously posted the report to their publicly accessible website, they should remove the report and post a public notification that the report was removed. The auditors should then determine whether to perform the additional engagement work necessary to reissue the report, including any revised findings or conclusions, or to repost the original report if the additional engagement work does not result in a change in findings or conclusions.

Application Guidance: GAGAS Conceptual Framework Approach to Independence

3.35 For consideration of auditor independence, offices or units of an audit organization, or related or affiliated entities under common control, are not differentiated from one another. Consequently, for the purposes of evaluating independence using the conceptual framework, an audit organization that includes multiple offices or units, or includes multiple entities related or affiliated through common control, is considered to be one audit organization. Common ownership may also affect independence in appearance regardless of the level of control.

Identifying Threats

- **3.36** Facts and circumstances that create threats to independence can result from events such as the start of a new engagement, assignment of new personnel to an ongoing engagement, and acceptance of a nonaudit service for an audited entity.
- **3.37** Threats to independence may be created by a wide range of relationships and circumstances. Circumstances that result in a threat to independence in one of the categories may result in other threats as well.
- **3.38** Examples of circumstances that create self-interest threats for an auditor follow:
 - **a.** An audit organization having undue dependence on income from a particular audited entity.
 - **b.** A member of the audit team entering into employment negotiations with an audited entity.
 - **c.** An audit organization discovering a significant error when evaluating the results of a previous professional service provided by the audit organization.
 - d. A member of the audit team having a direct financial interest in the audited entity. However, this would not preclude auditors from auditing pension plans that they participate in if (1) the auditors have no control over the investment strategy, benefits, or other management issues associated with the pension plan and (2) the auditors belong to such pension plan as part of their employment with the audit organization or prior employment with the audited

entity, provided that the plan is normally offered to all employees in equivalent employment positions.

- **3.39** Examples of circumstances that create self-review threats for an auditor follow:
 - **a.** An audit organization issuing a report on the effectiveness of the operation of financial or performance management systems after designing or implementing the systems.
 - **b.** An audit organization having prepared the original data used to generate records that are the subject matter of the engagement.
 - **c.** An audit organization providing a service for an audited entity that directly affects the subject matter information of the engagement.
 - **d.** A member of the engagement team being, or having recently been, employed by the audited entity in a position to exert significant influence over the subject matter of the engagement.
- **3.40** Examples of circumstances that create bias threats for an auditor follow:
 - **a.** A member of the engagement team having preconceptions about the objectives of a program under audit that are strong enough to affect the auditor's objectivity.
 - b. A member of the engagement team having biases associated with political, ideological, or social convictions that result from membership or employment in, or loyalty to, a particular type of policy, group, entity, or level of government that could affect the auditor's objectivity.
- **3.41** Examples of circumstances that create familiarity threats for an auditor follow:
 - **a.** A member of the engagement team having a close or immediate family member who is a principal or senior manager of the audited entity.
 - **b.** A member of the engagement team having a close or immediate family member who is an employee of the audited entity and is in

- a position to exert significant influence over the subject matter of the engagement.
- **c.** A principal or employee of the audited entity having recently served on the engagement team in a position to exert significant influence over the subject matter of the engagement.
- **d.** An auditor accepting gifts or preferential treatment from an audited entity, unless the value is trivial or inconsequential.
- **e.** Senior engagement personnel having a long association with the audited entity.
- **3.42** Examples of circumstances that create undue influence threats for an auditor or audit organization include existence of the following:
 - a. External interference or influence that could improperly limit or modify the scope of an engagement or threaten to do so, including exerting pressure to inappropriately reduce the extent of work performed in order to reduce costs or fees.
 - b. External interference with the selection or application of engagement procedures or in the selection of transactions to be examined.
 - **c.** Unreasonable restrictions on the time allowed to complete an engagement or issue the report.
 - **d.** External interference over assignment, appointment, compensation, and promotion.
 - **e.** Restrictions on funds or other resources provided to the audit organization that adversely affect the audit organization's ability to carry out its responsibilities.
 - **f.** Authority to overrule or to inappropriately influence the auditors' judgment as to the appropriate content of the report.
 - g. Threat of replacing the auditor or the audit organization based on a disagreement with the contents of an audit report, the auditors' conclusions, or the application of an accounting principle or other criteria.

- h. Influences that jeopardize the auditors' continued employment for reasons other than incompetence, misconduct, or the audited entity's need for GAGAS engagements.
- **3.43** Examples of circumstances that create management participation threats for an auditor follow:
 - **a.** A member of the engagement team being, or having recently been, a principal or senior manager of the audited entity.
 - b. An auditor serving as a voting member of an entity's management committee or board of directors, making policy decisions that affect future direction and operation of an entity's programs, supervising entity employees, developing or approving programmatic policy, authorizing an entity's transactions, or maintaining custody of an entity's assets.
 - c. An auditor or audit organization recommending a single individual for a specific position that is key to the audited entity or program under audit, or otherwise ranking or influencing management's selection of the candidate.
 - **d.** An auditor preparing management's corrective action plan to deal with deficiencies detected in the engagement.
- **3.44** Examples of circumstances that create structural threats for an auditor follow:
 - **a.** For both external and internal audit organizations, structural placement of the audit function within the reporting line of the areas under audit.
 - **b.** For internal audit organizations, administrative direction from the audited entity's management.

Evaluating Threats

- **3.45** Threats to independence are evaluated both individually and in the aggregate, as threats can have a cumulative effect on auditors' independence.
- **3.46** When evaluating threats to independence, an acceptable level is a level at which a reasonable and informed third party would likely conclude

that the audit organization or auditor is independent. The concept of a reasonable and informed third party is a test that involves an evaluation by a hypothetical person. Such a person possesses skills, knowledge, and experience to objectively evaluate the appropriateness of the auditor's judgments and conclusions. This evaluation entails weighing all the relevant facts and circumstances, including any safeguards applied, that the auditor knows, or could reasonably be expected to know, at the time that the evaluation is made.

- **3.47** A threat to independence is not at an acceptable level if it either
 - could affect the auditors' ability to conduct an engagement without being affected by influences that compromise professional judgment or
 - b. could expose the auditors or audit organization to circumstances that would cause a reasonable and informed third party to conclude that the integrity, objectivity, or professional skepticism of the audit organization, or an auditor, had been compromised.
- **3.48** The GAGAS section on nonaudit services in paragraphs 3.64 through 3.106 provides requirements and guidance on evaluating threats to independence related to nonaudit services that auditors provide to audited entities. That section also enumerates specific nonaudit services that always impair auditor independence with respect to audited entities and that auditors are prohibited from providing to audited entities.

Applying Safeguards

3.49 Safeguards are actions or other measures, individually or in combination, that auditors and audit organizations take that effectively eliminate threats to independence or reduce them to an acceptable level. Safeguards vary depending on the facts and circumstances.

3.50 Examples of safeguards include

- a. consulting an independent third party, such as a professional organization, a professional regulatory body, or another auditor to discuss engagement issues or assess issues that are highly technical or that require significant judgment;
- **b.** involving another audit organization to perform or re-perform part of the engagement;

- **c.** having an auditor who was not a member of the engagement team review the work performed; and
- **d.** removing an auditor from an engagement team when that auditor's financial or other interests or relationships pose a threat to independence.
- **3.51** The lists of safeguards in 3.50 and 3.69 cannot provide safeguards for all circumstances. They may, however, provide a starting point for auditors who have identified threats to independence and are considering what safeguards could eliminate those threats or reduce them to an acceptable level. In some cases, multiple safeguards may be necessary to address a threat.

Audit Organizations in Government Entities

- **3.52** The ability of an audit organization structurally located in a government entity to perform work and report the results objectively can be affected by its placement within the government entity and the structure of the government entity being audited. The independence standard applies to auditors in both external audit organizations (reporting to third parties externally or to both internal and external parties) and internal audit organizations (reporting only to senior management within the audited entity). Such audit organizations are often subject to constitutional or statutory safeguards that mitigate the effects of structural threats to independence.
- **3.53** For external audit organizations, constitutional or statutory safeguards that mitigate the effects of structural threats to independence may include governmental structures under which a government audit organization is
 - at a level of government other than the one of which the audited entity is part (federal, state, or local)—for example, federal auditors auditing a state government program—or
 - **b.** placed within a different branch of government from that of the audited entity—for example, legislative auditors auditing an executive branch program.
- **3.54** Safeguards other than those described in paragraph 3.53 may mitigate threats resulting from governmental structures. For external audit organizations, structural threats may be mitigated if the head of the audit

organization meets any of the following criteria in accordance with constitutional or statutory requirements:

- **a.** directly elected by voters of the jurisdiction being audited;
- **b.** elected or appointed by a legislative body, subject to removal by a legislative body, and reporting the results of engagements to and accountable to a legislative body;
- c. appointed by someone other than a legislative body, so long as the appointment is confirmed by a legislative body and removal from the position is subject to oversight or approval by a legislative body, and reports the results of engagements to and is accountable to a legislative body; or
- d. appointed by, accountable to, reports to, and can only be removed by a statutorily created governing body, the majority of whose members are independently elected or appointed and are outside the organization being audited.
- **3.55** In addition to the criteria in paragraphs 3.53 and 3.54, GAGAS recognizes that there may be other organizational structures under which external audit organizations in government entities could be considered independent. If appropriately designed and implemented, these structures provide safeguards that prevent the audited entity from interfering with the audit organization's ability to perform the work and report the results impartially. An external audit organization may be structurally independent under a structure different from the ones listed in paragraphs 3.53 and 3.54 if the government audit organization is subject to all of the following constitutional or statutory provisions. The following constitutional or statutory provisions may also be used as safeguards to augment those listed in paragraphs 3.53 and 3.54:
 - **a.** protections that prevent the audited entity from abolishing the audit organization;
 - **b.** protections requiring that if the head of the audit organization is removed from office, the head of the agency reports this fact and the reasons for the removal to the legislative body;
 - **c.** protections that prevent the audited entity from interfering with the initiation, scope, timing, and completion of any engagement;

- **d.** protections that prevent the audited entity from interfering with audit reporting, including the findings and conclusions or the manner, means, or timing of the audit organization's reports;
- e. protections that require the audit organization to report to a legislative body or other independent governing body on a recurring basis;
- f. protections that give the audit organization sole authority over the selection, retention, advancement, and dismissal of its personnel; and
- **g.** access to records and documents related to the agency, program, or function being audited and access to government officials or other individuals as needed to conduct the engagement.
- **3.56** Government internal auditors who work under the direction of the audited entity's management are considered structurally independent for the purposes of reporting internally, if the head of the audit organization meets all of the following criteria:
 - **a.** is accountable to the head or deputy head of the government entity or to those charged with governance;
 - **b.** reports the engagement results both to the head or deputy head of the government entity and to those charged with governance;
 - **c.** is located organizationally outside the staff or line management function of the unit under audit:
 - **d.** has access to those charged with governance; and
 - **e.** is sufficiently removed from pressures to conduct engagements and report findings, opinions, and conclusions objectively without fear of reprisal.

Internal Auditors

3.57 Certain entities employ auditors to work for entity management. These auditors may be subject to administrative direction from persons involved in the entity management process. Such audit organizations are internal audit functions and are encouraged to use the Institute of Internal

Auditors' *International Standards for the Professional Practice of Internal Auditing*, in conjunction with GAGAS.

3.58 When an internal audit organization conducts engagements pertaining to external parties, such as contractors or entities subject to other outside agreements, and no impairments to independence exist, the audit organization can be considered independent as an external audit organization of those external parties.

Requirements: Independence Impairments

- **3.59** Auditors should conclude that independence is impaired if no safeguards have been effectively applied to eliminate an unacceptable threat or reduce it to an acceptable level.
- **3.60** When auditors conclude that independence of the engagement team or the audit organization is impaired under paragraph 3.59, auditors should decline to accept an engagement or should terminate an engagement in progress (except in circumstances discussed in paragraphs 3.25 or 3.84).

Application Guidance: Independence Impairments

- **3.61** Whether independence is impaired depends on the nature of the threat, whether the threat is of such significance that it would compromise an auditor's professional judgment or create the appearance that the auditor's integrity, objectivity, or professional skepticism may be compromised, and the specific safeguards applied to eliminate the threat or reduce it to an acceptable level.
- **3.62** If auditors conclude that an individual auditor's independence is impaired under paragraph 3.59, it may be necessary to terminate the engagement or it may be possible to take action that satisfactorily addresses the effect of the individual auditor's independence impairment.
- **3.63** Factors that are relevant in evaluating whether the independence of the engagement team or the audit organization is impaired by an individual auditor's independence impairment include
 - **a.** the nature and duration of the individual auditor's impairment;

- **b.** the number and nature of any previous impairments with respect to the current engagement;
- c. whether a member of the engagement team had knowledge of the interest or relationship that caused the individual auditor's impairment;
- d. whether the individual auditor whose independence is impaired is

 (1) a member of the engagement team or (2) another individual for whom there are independence requirements;
- **e.** the role of the individual auditor on the engagement team whose independence is impaired;
- f. the effect of the service, if any, on the accounting records or audited entity's financial statements if the individual auditor's impairment was caused by the provision of a nonaudit service;
- g. whether a partner or director of the audit organization had knowledge of the individual auditor's impairment and failed to ensure that the individual auditor's impairment was promptly communicated to an appropriate individual within the audit organization; and
- **h.** the extent of the self-interest, undue influence, or other threats created by the individual auditor's impairment.

Provision of Nonaudit Services to Audited Entities

Requirement: Nonaudit Services

3.64 Before auditors agree to provide a nonaudit service to an audited entity, they should determine whether providing such a service would create a threat to independence, either by itself or in aggregate with other nonaudit services provided, with respect to any GAGAS engagement they conduct.

Application Guidance: Nonaudit Services

3.65 Auditors have traditionally provided a range of nonaudit services that are consistent with their skills and expertise. Providing nonaudit services to audited entities may create threats to the independence of auditors or audit organizations.

- **3.66** For performance audits and agreed-upon procedures engagements, nonaudit services that are otherwise prohibited by GAGAS may be provided when such services do not relate to the specific subject matter of the engagement.
- **3.67** For financial audits, examination or review engagements, and reviews of financial statements, a nonaudit service otherwise prohibited by GAGAS and provided during the period covered by the financial statements may not threaten independence with respect to those financial statements provided that the following conditions exist:
 - **a.** the nonaudit service was provided prior to the period of professional engagement;
 - **b.** the nonaudit service related only to periods prior to the period covered by the financial statements; and
 - c. the financial statements for the period to which the nonaudit service did relate were audited by other auditors (or in the case of an examination, review, or review of financial statements, examined, reviewed, or audited by other auditors as appropriate).
- **3.68** Nonaudit services that auditors provide can affect independence of mind and in appearance in periods after the nonaudit services were provided. For example, if auditors have designed and implemented an accounting and financial reporting system that is expected to be in place for many years, a threat to independence in appearance may exist in subsequent periods for future engagements that those auditors conduct. For recurring engagements, having another independent audit organization conduct an engagement over the areas affected by the nonaudit service may provide a safeguard that allows the audit organization that provided the nonaudit service to mitigate the threat to its independence.
- **3.69** The following are examples of actions that in certain circumstances could be safeguards in addressing threats to independence related to nonaudit services:
 - **a.** not including individuals who provided the nonaudit service as engagement team members;
 - **b.** having another auditor, not associated with the engagement, review the engagement and nonaudit work as appropriate;

- **c.** engaging another audit organization to evaluate the results of the nonaudit service; or
- **d.** having another audit organization re-perform the nonaudit service to the extent necessary to enable that other audit organization to take responsibility for the service.

Routine Activities

- **3.70** Routine activities that auditors perform related directly to conducting an engagement, such as providing advice and responding to questions as part of an engagement, are not considered nonaudit services under GAGAS. Such routine activities generally involve providing advice or assistance to the audited entity on an informal basis as part of an engagement. Routine activities typically are insignificant in terms of time incurred or resources expended and generally do not result in a specific project or engagement or in the auditors producing a formal report or other formal work product. However, activities such as financial statement preparation, cash-to-accrual conversions, and reconciliations are considered nonaudit services under GAGAS, not routine activities related to the performance of an engagement, and are evaluated using the conceptual framework as discussed in paragraphs 3.87 through 3.95.
- **3.71** Routine activities directly related to an engagement may include the following:
 - **a.** providing advice to the audited entity on an accounting matter as an ancillary part of the overall financial audit;
 - **b.** providing advice to the audited entity on routine business matters;
 - **c.** educating the audited entity about matters within the technical expertise of the auditors; and
 - **d.** providing information to the audited entity that is readily available to the auditors, such as best practices and benchmarking studies.

Other Services Provided by Government Audit Organizations

3.72 Audit organizations in government entities frequently provide services that differ from the traditional professional services that an accounting or consulting firm provides to or for an audited entity. These types of services are often provided in response to a statutory

requirement, at the discretion of the authority of the audit organization, or to an engaging party (such as a legislative oversight body or an independent external organization) rather than a responsible party, and would generally not create a threat to independence. Examples of these types of services include the following:

- **a.** providing information or data to a requesting party without auditor evaluation or verification of the information or data:
- **b.** developing standards, methodologies, audit guides, audit programs, or criteria for use throughout the government or for use in certain specified situations;
- **c.** collaborating with other professional organizations to advance auditing of government entities and programs;
- **d.** developing question and answer documents to promote understanding of technical issues or standards;
- **e.** providing assistance and technical expertise to legislative bodies or independent external organizations;
- **f.** assisting legislative bodies by developing questions for use at hearings;
- **g.** providing training, speeches, and technical presentations;
- **h.** providing assistance in reviewing budget submissions;
- contracting for audit services on behalf of an audited entity and overseeing the audit contract, as long as the overarching principles are not violated and the auditor under contract reports to the audit organization and not to management; and
- **j.** providing audit, investigative, and oversight-related services that do not involve a GAGAS engagement, such as
 - (1) investigations of alleged fraud, violation of contract provisions or grant agreements, or abuse;
 - (2) periodic audit recommendation follow-up engagements and reports; and

(3) identifying best practices or leading practices for use in advancing the practices of government organizations.

Requirements: Management Responsibilities

- **3.73** Before auditors agree to provide nonaudit services to an audited entity that the audited entity's management requested and that could create a threat to independence, either by themselves or in aggregate with other nonaudit services provided, with respect to any GAGAS engagement they conduct, auditors should determine that the audited entity has designated an individual who possesses suitable skill, knowledge, or experience and that the individual understands the services to be provided sufficiently to oversee them.
- **3.74** Auditors should document consideration of management's ability to effectively oversee nonaudit services to be provided.
- **3.75** In cases where the audited entity is unable or unwilling to assume these responsibilities (for example, the audited entity does not have an individual with suitable skill, knowledge, or experience to oversee the nonaudit services provided, or is unwilling to perform such functions because of lack of time or desire), auditors should conclude that the provision of these services is an impairment to independence.
- **3.76** Auditors providing nonaudit services to audited entities should obtain agreement from audited entity management that audited entity management performs the following functions in connection with the nonaudit services:
 - a. assumes all management responsibilities;
 - oversees the services, by designating an individual, preferably within senior management, who possesses suitable skill, knowledge, or experience;
 - **c.** evaluates the adequacy and results of the services provided; and
 - **d.** accepts responsibility for the results of the services.
- **3.77** In connection with nonaudit services, auditors should establish and document their understanding with the audited entity's

management or those charged with governance, as appropriate, regarding the following:

- a. objectives of the nonaudit service,
- **b.** services to be provided,
- **c.** audited entity's acceptance of its responsibilities as discussed in paragraph 3.76,
- **d.** the auditors' responsibilities, and
- **e.** any limitations on the provision of nonaudit services.
- **3.78** Auditors should conclude that management responsibilities that the auditors perform for an audited entity are impairments to independence. If the auditors were to assume management responsibilities for an audited entity, the management participation threats created would be so significant that no safeguards could reduce them to an acceptable level.

Application Guidance: Management Responsibilities

- **3.79** A critical component of determining whether a threat to independence exists is consideration of management's ability to effectively oversee the nonaudit service to be provided. Although the responsible individual in management is required to have sufficient expertise to oversee the nonaudit services, management is not required to possess the expertise to perform or re-perform the services. However, indicators of management's ability to effectively oversee the nonaudit service include management's ability to determine the reasonableness of the results of the nonaudit services provided and to recognize a material error, omission, or misstatement in the results of the nonaudit services provided.
- **3.80** Management responsibilities involve leading and directing an entity, including making decisions regarding the acquisition, deployment, and control of human, financial, physical, and intangible resources.
- **3.81** The following are considered management responsibilities:
 - **a.** setting policies and strategic direction for the audited entity;

- b. directing and accepting responsibility for the actions of the audited entity's employees in the performance of their routine, recurring activities;
- **c.** having custody of an audited entity's assets;
- **d.** reporting to those charged with governance on behalf of management;
- **e.** deciding which of the audit organization's or outside third party's recommendations to implement;
- **f.** accepting responsibility for the management of an audited entity's project;
- **g.** accepting responsibility for designing, implementing, or maintaining internal control;
- providing services that are intended to be used as management's primary basis for making decisions that are significant to the subject matter of the engagement;
- developing an audited entity's performance measurement system when that system is material or significant to the subject matter of the engagement; and
- **j.** serving as a voting member of an audited entity's management committee or board of directors.
- **3.82** Whether a specific activity is a management responsibility as identified in paragraph 3.81 or otherwise depends on the facts and circumstances.

Requirements: Providing Nonaudit Services

3.83 Auditors who previously provided nonaudit services for an entity that is a prospective subject of an engagement should evaluate the effect of those nonaudit services on independence before agreeing to conduct a GAGAS engagement. If auditors provided a nonaudit service in the period to be covered by the engagement, they should (1) determine if GAGAS expressly prohibits the nonaudit service; (2) if

Chapter 3: Ethics, Independence, and Professional Judgment

audited entity management requested the nonaudit service, determine whether the skills, knowledge, and experience of the individual responsible for overseeing the nonaudit service were sufficient; and (3) determine whether a threat to independence exists and address any threats noted in accordance with the conceptual framework.

3.84 Auditors in a government entity may be required to provide a nonaudit service that impairs the auditors' independence with respect to a required engagement. If, because of constitutional or statutory requirements over which they have no control, the auditors can neither implement safeguards to reduce the resulting threat to an acceptable level nor decline to provide or terminate a nonaudit service that is incompatible with engagement responsibilities, auditors should disclose the nature of the threat that could not be eliminated or reduced to an acceptable level and modify the GAGAS compliance statement as discussed in paragraph 2.17b accordingly. Determining how to modify the GAGAS compliance statement in these circumstances is a matter of professional judgment.

Consideration of Specific Nonaudit Services

- **3.85** By their nature, certain nonaudit services directly support an entity's operations and, if provided to an audited entity, create a threat to the auditors' ability to maintain independence in mind and appearance. Some aspects of these services will impair auditors' ability to conduct GAGAS engagements for the entities to which the services are provided.
- **3.86** Auditors may be able to provide nonaudit services in the broad areas indicated in paragraphs 3.87 through 3.106 without impairing independence if (1) the nonaudit services are not expressly prohibited by GAGAS requirements, (2) the auditors have determined that the requirements for providing nonaudit services in paragraphs 3.73 through 3.78 and paragraph 3.83 have been met, and (3) any significant threats to independence have been eliminated or reduced to an acceptable level through the application of safeguards. The conceptual framework enables auditors to evaluate independence given the facts and circumstances of individual services that are not specifically prohibited.

Requirements: Preparing Accounting Records and Financial Statements

- **3.87** Auditors should conclude that the following services involving preparation of accounting records impair independence with respect to an audited entity:
 - a. determining or changing journal entries, account codes or classifications for transactions, or other accounting records for the entity without obtaining management's approval;
 - **b.** authorizing or approving the entity's transactions; and
 - **c.** preparing or making changes to source documents without management approval.
- **3.88** Auditors should conclude that preparing financial statements in their entirety from a client-provided trial balance or underlying accounting records creates significant threats to auditors' independence, and should document the threats and safeguards applied to eliminate and reduce threats to an acceptable level in accordance with paragraph 3.33 or decline to provide the services.²²
- **3.89** Auditors should identify as threats to independence any services related to preparing accounting records and financial statements, other than those defined as impairments to independence in paragraph 3.87 and significant threats in paragraph 3.88. These services include
 - recording transactions for which management has determined or approved the appropriate account classification, or posting coded transactions to an audited entity's general ledger;
 - **b.** preparing certain line items or sections of the financial statements based on information in the trial balance;
 - **c.** posting entries that an audited entity's management has approved to the entity's trial balance; and

²²See fig. 2 at the end of ch. 3 for a flowchart on independence considerations for preparing accounting records and financial statements.

- **d.** preparing account reconciliations that identify reconciling items for the audited entity management's evaluation.
- **3.90** Auditors should evaluate the significance of threats to independence created by providing any services discussed in paragraph 3.89 and should document the evaluation of the significance of such threats.²³

Application Guidance: Preparing Accounting Records and Financial Statements

- **3.91** Management is responsible for the preparation and fair presentation of the financial statements in accordance with the applicable financial reporting framework, even if the auditor assisted in drafting those financial statements. Consequently, an auditor accepting responsibility for the preparation and fair presentation of financial statements that the auditor will subsequently audit or that will otherwise be the subject matter of an engagement would impair the auditor's independence.
- **3.92** Source documents include those providing evidence that transactions have occurred (for example, purchase orders, payroll time records, customer orders, and contracts). Such records also include an audited entity's general ledger and subsidiary records or equivalent.
- **3.93** Determining whether services, as discussed in paragraph 3.89, are significant threats and require safeguards is a matter of professional judgment.
- **3.94** Factors that are relevant in evaluating the significance of any threats created by providing services as discussed in paragraph 3.89 include
 - **a.** the extent to which the outcome of the service could have a material effect on the financial statements.
 - the degree of subjectivity involved in determining the appropriate amounts or treatment for those matters reflected in the financial statements, and

²³See para. 3.33 for additional requirements related to documenting threats identified and safeguards applied to eliminate or reduce threats to an acceptable level.

- **c.** the extent of the audited entity's involvement in determining significant matters of judgment.
- **3.95** Providing clerical assistance, such as typing, formatting, printing, and binding financial statements, is unlikely to be a significant threat.

Requirement: Internal Audit Assistance Services Provided by External Auditors

- **3.96** Internal audit assistance services involve assisting an entity in performing its internal audit activities. Auditors should conclude that the following internal audit assistance activities impair an external auditor's independence with respect to an audited entity:
 - **a.** setting internal audit policies or the strategic direction of internal audit activities;
 - **b.** performing procedures that form part of the internal control, such as reviewing and approving changes to employee data access privileges; and
 - **c.** determining the scope of the internal audit function and resulting work.

Requirements: Internal Control Evaluation as a Nonaudit Service

- **3.97** Auditors should conclude that providing or supervising ongoing monitoring procedures over an entity's system of internal control impairs independence because the management participation threat created is so significant that no safeguards could reduce the threat to an acceptable level.
- **3.98** Separate evaluations are sometimes provided as a nonaudit service. When providing separate evaluations as nonaudit services, auditors should evaluate the significance of the threat created by performing separate evaluations and apply safeguards when necessary to eliminate the threat or reduce it to an acceptable level.

Application Guidance: Internal Control Evaluation as a Nonaudit Service

- **3.99** Accepting responsibility for designing, implementing, or maintaining internal control includes accepting responsibility for designing, implementing, or maintaining monitoring procedures. Monitoring involves the use of either ongoing monitoring procedures or separate evaluations to gather and analyze persuasive information supporting conclusions about the effectiveness of the internal control system. Ongoing monitoring procedures performed on behalf of management are built into the routine, recurring operating activities of an entity.
- **3.100** Factors relevant to evaluating the significance of any threats created by providing separate evaluations as a nonaudit service include
 - **a.** the frequency of the separate evaluations and
 - **b.** the scope or extent of the controls (in relation to the scope of the engagement conducted) being evaluated.
- **3.101** A separate evaluation provided as a nonaudit service is not a substitute for engagement procedures in a GAGAS engagement.

Requirement: Information Technology Services

- **3.102** Auditors should conclude that providing information technology (IT) services to an audited entity that relate to the period under audit impairs independence if those services include
 - a. designing or developing an audited entity's financial information system or other IT system that will play a significant role in the management of an area of operations that is or will be the subject matter of an engagement;
 - b. making other than insignificant modifications to source code underlying an audited entity's existing financial information system or other IT system that will play a significant role in the management of an area of operations that is or will be the subject matter of an engagement;

- **c.** supervising audited entity personnel in the daily operation of an audited entity's information system; or
- d. operating an audited entity's network, financial information system, or other IT system that will play a significant role in the management of an area of operations that is or will be the subject matter of an engagement.

Application Guidance: Information Technology Services

3.103 Services related to IT systems include the design or implementation of hardware or software systems. The systems may aggregate source data, form part of the internal control over the subject matter of the engagement, or generate information that affects the subject matter of the engagement.

Requirement: Appraisal, Valuation, and Actuarial Services

3.104 Auditors should conclude that independence is impaired if an audit organization provides appraisal, valuation, or actuarial services to an audited entity when (1) the services involve a significant degree of subjectivity and (2) the results of the service, individually or when combined with other valuation, appraisal, or actuarial services, are material to the audited entity's financial statements or other information on which the audit organization is reporting.

Application Guidance: Appraisal, Valuation, and Actuarial Services

3.105 A valuation comprises the making of assumptions with regard to future developments; the application of appropriate methodologies and techniques; and the combination of both to compute a certain value, or range of values, for an asset, a liability, or an entity as a whole.

Requirement: Other Nonaudit Services

- **3.106** Auditors should conclude that providing certain other nonaudit services impairs an external auditor's independence with respect to an audited entity. These activities include the following:
 - a. Advisory service
 - (1) Assuming any management responsibilities
 - **b.** Benefit plan administration
 - (1) Making policy decisions on behalf of management
 - (2) Interpreting the provisions in a plan document for a plan participant on behalf of management without first obtaining management's concurrence
 - (3) Making disbursements on behalf of the plan
 - (4) Having custody of the plan's assets
 - (5) Serving in a fiduciary capacity, as defined under the Employee Retirement Income Security Act of 1974²⁴
 - c. Business risk consulting
 - (1) Making or approving business risk decisions
 - (2) Presenting business risk considerations to those charged with governance on behalf of management
 - d. Executive or employee recruiting
 - (1) Committing the audited entity to employee compensation or benefit arrangements
 - (2) Hiring or terminating the audited entity's employees

²⁴See Section 2510.3-21 of Title 29, *Code of Federal Regulations*.

- e. Investment advisory or management
 - (1) Making investment decisions on behalf of management or otherwise having discretionary authority over an audited entity's investments
 - (2) Executing a transaction to buy or sell an audited entity's investments
 - (3) Having custody of an audited entity's assets, such as taking temporary possession of securities

Documentation

Requirement: Documentation

- **3.107** While insufficient documentation of an auditor's compliance with the independence standard does not impair independence, auditors should prepare appropriate documentation under the GAGAS quality control and assurance requirements.²⁵ The independence standard includes the following documentation requirements, where applicable:
 - a. document threats to independence that require the application of safeguards, along with safeguards applied, in accordance with the conceptual framework for independence as required by paragraph 3.33;
 - b. document the safeguards in paragraphs 3.52 through 3.56 if an audit organization is structurally located within a government entity and is considered structurally independent based on those safeguards;
 - c. document consideration of audited entity management's ability to effectively oversee a nonaudit service to be provided by the auditor as indicated in paragraph 3.74;

²⁵See para. 5.04 for additional discussion of documenting compliance with quality control policies and procedures and paras. 5.08 through 5.11 for additional discussion of policies and procedures on independence, legal, and ethical requirements.

- **d.** document the auditor's understanding with an audited entity for which the auditor will provide a nonaudit service as indicated in paragraph 3.77; and
- **e.** document the evaluation of the significance of the threats created by providing any of the services discussed in paragraph 3.89.

Application Guidance: Documentation

3.108 Documentation of independence considerations provides evidence of the auditor's judgments in forming conclusions regarding compliance with independence requirements.

Professional Judgment

Requirement: Professional Judgment

3.109 Auditors must use professional judgment in planning and conducting the engagement and in reporting the results.

Application Guidance: Professional Judgment

- 3.110 Professional judgment includes exercising reasonable care and professional skepticism. Reasonable care includes acting diligently in accordance with applicable professional standards and ethical principles. Attributes of professional skepticism include a questioning mind, awareness of conditions that may indicate possible misstatement owing to error or fraud, and a critical assessment of evidence. Professional skepticism includes being alert to, for example, evidence that contradicts other evidence obtained or information that brings into question the reliability of documents or responses to inquiries to be used as evidence. Further, it includes a mindset in which auditors assume that management is neither dishonest nor of unquestioned honesty. Auditors may accept records and documents as genuine unless they have reason to believe the contrary. Auditors may consider documenting procedures undertaken to support their application of professional skepticism in highly judgmental or subjective areas under audit.
- **3.111** Using the auditor's professional knowledge, skills, and abilities, in good faith and with integrity, to diligently gather information and

objectively evaluate the sufficiency and appropriateness of evidence is a critical component of GAGAS engagements. Professional judgment and competence are interrelated because judgments made depend upon the auditor's competence, as discussed in chapter 4.

- **3.112** Professional judgment represents the application of the collective knowledge, skills, and abilities of all the personnel involved with an engagement, as well as the professional judgment of individual auditors. In addition, professional judgment may involve consultation with other stakeholders, specialists, and management in the audit organization.
- **3.113** Using professional judgment is important to auditors in carrying out all aspects of their professional responsibilities, including following the independence standards and related conceptual framework; maintaining objectivity and credibility; assigning competent personnel to the engagement; defining the scope of work; evaluating, documenting, and reporting the results of the work; and maintaining appropriate quality control over the engagement process.
- **3.114** Using professional judgment is important to auditors in applying the conceptual framework to determine independence in a given situation. This includes identifying and evaluating any threats to independence, including threats to the appearance of independence, and related safeguards that may mitigate the identified threats.²⁶
- **3.115** Using professional judgment is important to auditors in determining the necessary level of understanding of the engagement subject matter and related circumstances. This includes considering whether the audit team's collective experience, training, knowledge, skills, abilities, and overall understanding are sufficient to assess the risks that the subject matter of the engagement may contain a significant inaccuracy or could be misinterpreted.²⁷
- **3.116** An auditor's consideration of the risk level of each engagement, including the risk of arriving at improper conclusions, is also important. Within the context of audit risk, exercising professional judgment in determining the sufficiency and appropriateness of evidence to be used to support the findings and conclusions based on the engagement

²⁶See para. 3.21b for a description of independence in appearance.

²⁷See paras. 4.02 through 4.15 for a discussion of competence.

Chapter 3: Ethics, Independence, and Professional Judgment

objectives and any recommendations reported is integral to the engagement process.

3.117 While this requirement places responsibility on each auditor and audit organization to exercise professional judgment in planning and conducting an engagement, it does not imply unlimited responsibility nor does it imply infallibility on the part of either the individual auditor or the audit organization. Absolute assurance is not attainable because of factors such as the nature of evidence and characteristics of fraud. Professional judgment does not mean eliminating all possible limitations or weaknesses associated with a specific engagement, but rather identifying, assessing, mitigating, and concluding on them.

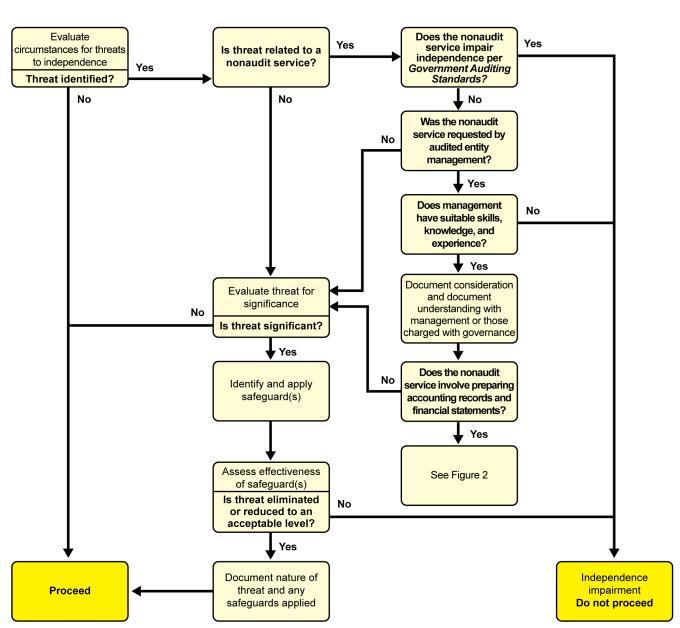


Figure 1: Generally Accepted Government Auditing Standards Conceptual Framework for Independence

Source: GAO. | GAO-18-568G

Is the nonaudit service preparing financial statements No Evaluate threat for **Document** in their entirety significance evaluation from a client-provided No trial balance or and proceed Is threat significant? underlying accounting records? Yes Yes Identify and apply safeguard(s) Assess effectiveness of safeguard(s) Independence No impairment Is threat eliminated Do not proceed or reduced to an acceptable level? Yes Document nature of threat and any safeguards applied **Proceed**

Figure 2: Independence Considerations for Preparing Accounting Records and Financial Statements

Source: GAO. | GAO-18-568G

Chapter 4: Competence and Continuing Professional Education

4.01 This chapter establishes the generally accepted government auditing standards (GAGAS) requirements for competence and continuing professional education (CPE). Competence includes being knowledgeable about the specific GAGAS requirements and having the skills and abilities to proficiently apply that knowledge on GAGAS engagements. CPE contributes to auditors' competence. The requirements of this chapter are intended to be followed in conjunction with all other applicable GAGAS requirements.

Competence

Requirements: General

- **4.02** The audit organization's management must assign auditors to conduct the engagement who before beginning work on the engagement collectively possess the competence needed to address the engagement objectives and perform their work in accordance with GAGAS.
- **4.03** The audit organization's management must assign auditors who before beginning work on the engagement possess the competence needed for their assigned roles.
- **4.04** The audit organization should have a process for recruitment, hiring, continuous development, assignment, and evaluation of personnel so that the workforce has the essential knowledge, skills, and abilities necessary to conduct the engagement. The nature, extent, and formality of the process will depend on various factors, such as the size of the audit organization, its structure, and its work.

Application Guidance: General

- **4.05** Competence is the knowledge, skills, and abilities, obtained from education and experience, necessary to conduct the GAGAS engagement. Competence enables auditors to make sound professional judgments. Competence includes possessing the technical knowledge and skills necessary for the assigned role and the type of work being done. This includes possessing specific knowledge about GAGAS.
- **4.06** Competence is derived from a combination of education and experience. Education is a structured and systematic process aimed at developing knowledge, skills, and other abilities; it is a process that is typically but not exclusively conducted in academic or learning

environments. Experience refers to workplace activities that are relevant to developing professional proficiency. Competence is not necessarily measured by years of auditing experience because such a quantitative measurement may not accurately reflect the kinds of experiences gained by auditors in any given time period. Maintaining competence through a commitment to learning and development throughout auditors' professional lives is an important element for auditors.

Application Guidance: Indicators of Competence

Technical Knowledge and Skills

- **4.07** The knowledge, skills, and abilities needed when conducting an engagement in accordance with GAGAS include the understanding necessary to proficiently apply
 - a. GAGAS;
 - **b.** standards, statutory requirements, regulations, criteria, and guidance applicable to auditing or the objectives for the engagement(s) being conducted; and
 - **c.** techniques, tools, and guidance related to professional expertise applicable to the work being performed.

Auditor proficiency in these areas helps ensure that engagements are conducted in accordance with GAGAS.

- **4.08** Achieving the knowledge, skills, and abilities needed to conduct a GAGAS engagement may include
 - **a.** having prior experience in the subject matter or type of engagement;
 - **b.** completing CPE related to the subject matter or type of engagement; and
 - **c.** obtaining degrees or certifications relevant to the subject matter or type of engagement.

Competence for Assigned Roles

- **4.09** The audit organization and engagement teams may consider the levels of proficiency needed for each role on the engagement when assigning auditors to the engagement.
- **4.10** Roles on the engagement generally include the following:
 - a. Nonsupervisory auditors: Auditors in these roles plan or perform engagement procedures. Work situations for these auditors are characterized by low levels of ambiguity, complexity, and uncertainty. The nonsupervisory auditor role necessitates at least a basic level of proficiency.
 - b. Supervisory auditors: Auditors in these roles plan engagements, perform engagement procedures, or direct engagements. Work situations for these auditors are characterized by moderate levels of ambiguity, complexity, and uncertainty. The supervisory auditor role necessitates at least an intermediate level of proficiency.
 - c. Partners and directors: Auditors in these roles plan engagements, perform engagement procedures, or direct or report on engagements. Partners and directors may also be responsible for reviewing engagement quality prior to issuing the report, for signing the report, or both. Work situations for these auditors are characterized by high levels of ambiguity, complexity, and uncertainty. The partner and director role necessitates an advanced level of proficiency.

4.11 Definitions of key terms follow:

- **a.** Planning: Determining engagement objectives, scope, and methodology; establishing criteria to evaluate matters subject to audit; or coordinating the work of the other audit organizations. This definition excludes auditors whose role is limited to gathering information used in planning the engagement.
- **b.** Directing: Supervising the efforts of others who are involved in accomplishing the objectives of the engagement or reviewing engagement work to determine whether those objectives have been accomplished.

- **c.** Performing engagement procedures: Performing tests and procedures necessary to accomplish the engagement objectives in accordance with GAGAS.
- **d.** Reporting: Determining the report content and substance or reviewing reports to determine whether the engagement objectives have been accomplished and the evidence supports the report's technical content and substance prior to issuance. This includes signing the report.

Requirement: Specialists

4.12 The engagement team should determine that specialists assisting the engagement team on a GAGAS engagement are qualified and competent in their areas of specialization.

Application Guidance: Specialists

- **4.13** Some engagements may necessitate the use of specialized techniques or methods that call for the skills of specialists. Specialists do not include individuals with special skill or knowledge related to specialized areas within the field of accounting or auditing, such as income taxation and information technology. Such individuals are considered auditors.
- **4.14** The competence and qualifications of specialists significantly affect whether their work will be adequate for the engagement team's purposes and will meet GAGAS requirements. Competence of specialists relates to the nature and level of expertise. Qualifications of specialists relate to their professional certifications, reputations, and previous work in the subject matter. Other relevant factors include the ability of specialists to exercise competence in the circumstances of the engagement and the effects that bias, conflict of interest, or the influence of others may have on the specialists' professional judgment.
- **4.15** Sources that may inform the auditors' assessment of the competence and professional qualifications of a specialist include the following:
 - **a.** the professional certification, license, or other recognition of the competence of the specialist in his or her field, as appropriate;

- **b.** the reputation and standing of the specialist in the views of peers and others familiar with the specialist's capability or performance;
- **c.** the specialist's experience and previous work in the subject matter;
- d. the auditors' assessment of the specialist's knowledge and qualification based on prior experience in using the specialist's work;
- e. the specialist's knowledge of any technical performance standards or other professional or industry requirements in the specialist's field (for example, ethical standards and other membership requirements of a professional body or industry association, accreditation standards of a licensing body, or requirements imposed by law or regulation);
- **f.** the knowledge of the specialist with respect to relevant auditing standards; and
- g. the assessment of unexpected events, changes in conditions, or the evidence obtained from the results of engagement procedures that indicate it may be necessary to reconsider the initial evaluation of the competence and qualifications of a specialist as the engagement progresses.

Continuing Professional Education

Requirements: General

4.16 Auditors who plan, direct, perform engagement procedures for, or report on an engagement conducted in accordance with GAGAS should develop and maintain their professional competence by completing at least 80 hours of CPE in every 2-year period as follows.

Subject matter categories of CPE
Subject matter directly related to the government environment, government auditing, or the specific or unique environment in which the audited entity operates
Subject matter that directly enhance auditors' professional expertise to conduct engagements

- **4.17** Auditors should complete at least 20 hours of CPE in each year of the 2-year periods.
- **4.18** The audit organization should maintain documentation of each auditor's CPE.²⁸

Application Guidance: General

- **4.19** The continuing competence of the audit organization's personnel depends, in part, on an appropriate level of CPE so that auditors maintain the knowledge, skills, and abilities necessary to conduct the GAGAS engagement. Obtaining CPE specifically on GAGAS, particularly during years in which there are revisions to the standards, may assist auditors in maintaining the competence necessary to conduct GAGAS engagements.
- **4.20** CPE used to fulfill the 24-hour requirement may be taken at any time during the 2-year measurement period.

Application Guidance: Subject Matter Categories of CPE

- **4.21** Determining what subjects are appropriate for individual auditors to satisfy the CPE requirements is a matter of professional judgment to be exercised by auditors in consultation with appropriate officials in their audit organization. When determining what specific subjects qualify for the CPE requirement, the auditors may consider the types of knowledge, skills, and abilities, and the level of proficiency necessary, in order to be competent for their assigned roles. Auditors may consider probable future engagements to which they may be assigned when selecting specific CPE subjects to satisfy the 24-hour and the 56-hour CPE requirements. The audit organization is ultimately responsible for determining whether a subject or topic qualifies as acceptable for its auditors.
- **4.22** The subject matter categories for the 24-hour requirement may be used to satisfy the 56-hour CPE requirement. If CPE in any of the subject matter and topics that would satisfy the 56-hour requirement, as discussed in paragraph 4.24, is tailored specifically to the government environment, such CPE may qualify toward satisfying the 24-hour

²⁸See paras. 4.51 and 5.16 for a discussion of CPE documentation.

requirement. Examples of CPE subjects that may qualify for each of the categories are listed below.

Subject Matter Directly Related to the Government Environment, Government Auditing, or the Specific or Unique Environment in Which the Audited Entity Operates (24-Hour Requirement)

- **4.23** Subject matter directly related to the government environment, government auditing, or the specific or unique environment in which the audited entity operates may include, but is not limited to, the following:
 - **a.** generally accepted government auditing standards (GAGAS) and related topics, such as internal control as addressed in GAGAS;
 - **b.** the applicable American Institute of Certified Public Accountants' (AICPA) Statements on Auditing Standards;²⁹
 - **c.** the applicable AICPA Statements on Standards for Attestation Engagements and Statements on Standards for Accounting and Review Services;³⁰
 - d. the applicable auditing standards issued by the Institute of Internal Auditors, the Public Company Accounting and Oversight Board, the International Auditing and Assurance Standards Board, or other auditing standard-setting body;
 - e. U.S. generally accepted accounting principles, or the applicable financial reporting framework being used, such as those issued by the Federal Accounting Standards Advisory Board, the Governmental Accounting Standards Board, or the Financial Accounting Standards Board;
 - f. Standards for Internal Control in the Federal Government;³¹

 $^{^{29}}$ See para. 6.01 for a discussion of the AICPA standards incorporated into GAGAS for financial audits.

³⁰See para. 7.01 for a discussion of the AICPA standards incorporated into GAGAS for attestation engagements and reviews of financial statements.

³¹GAO, Standards for Internal Control in the Federal Government, GAO-14-704G (Washington, D.C.: September 2014).

- g. Internal Control—Integrated Framework, 32 as applicable;
- h. requirements for recipients of federal contracts or grants, such as Single Audits under the *Uniform Administrative Requirements*, Cost Principles, and Audit Requirements for Federal Awards;³³
- requirements for federal, state, or local program audits;
- relevant or applicable audit standards or guides, including those for information technology auditing and forensic auditing;
- **k.** information technology auditing topics applicable to the government environment;
- **I.** fraud topics applicable to a government environment;
- **m.** statutory requirements, regulations, criteria, guidance, trends, risks, or topics relevant to the specific and unique environment in which the audited entity operates;
- n. statutory requirements, regulations, criteria, guidance, trends, risks, or topics relevant to the subject matter of the engagement, such as scientific, medical, environmental, educational, or any other specialized subject matter;
- o. topics directly related to the government environment, such as the nature of government (structures, financing, and operations), economic or other conditions and pressures facing governments, common government financial management issues, appropriations, measurement or evaluation of government financial or program performance, and application of general audit methodologies or techniques to a government environment or program;

³²Committee of Sponsoring Organizations of the Treadway Commission, *Internal Control—Integrated Framework* (New York: American Institute of Certified Public Accountants, 2013).

³³See Part 200, Subpart F, of Title 2, Code of Federal Regulations.

- p. specialized audit methodologies or analytical techniques, such as the use of complex survey instruments, actuarial estimates, statistical analysis tests, or statistical or nonstatistical sampling;
- **q.** performance auditing topics, such as obtaining evidence, professional skepticism, and other applicable audit skills;³⁴
- r. government ethics and independence;
- s. partnerships between governments, businesses, and citizens;
- t. legislative policies and procedures;
- **u.** topics related to fraud, waste, abuse, or improper payments affecting government entities; and
- v. compliance with laws and regulations.

Subject Matter That Directly Enhances Auditors' Professional Expertise to Conduct Engagements (56-Hour Requirement)

- **4.24** Subject matter that directly enhances auditors' professional expertise to conduct engagements may include, but is not limited to, the following:
 - **a.** subject matter categories for the 24-hour requirement listed in paragraph 4.23;
 - **b.** general ethics and independence;
 - **c.** topics related to accounting, acquisitions management, asset management, budgeting, cash management, contracting, data analysis, program performance, or procurement;
 - **d.** communicating clearly and effectively, both orally and in writing;
 - e. managing time and resources;
 - f. leadership;

³⁴See chs. 8 and 9 for performance audit topics that may be included.

- **g.** software applications used in conducting engagements;
- h. information technology; and
- i. economics, human capital management, social and political sciences, and other academic disciplines that may be applied in engagements, as applicable.

Application Guidance: Exemptions and Exceptions

- **4.25** Auditors may be exempted from the 56-hour CPE requirement by the audit organization, but not the 24-hour requirement, if they
 - **a.** charge less than 20 percent of their time annually to engagements conducted in accordance with GAGAS and
 - **b.** are only involved in performing engagement procedures, but not involved in planning, directing, or reporting on the engagement.

The 20 percent may be based on historical or estimated charges in a year, provided that the audit organization has a basis for this determination and monitors actual time. For auditors who change status such that they are charging more than 20 percent of their time annually to engagements under GAGAS, the audit organization may prorate the required CPE hours similar to when auditors are assigned to GAGAS engagements after the beginning of a 2-year CPE measurement period, as discussed in paragraph 4.42.

- **4.26** Nonsupervisory auditors who charge less than 40 hours of their time annually to engagements conducted in accordance with GAGAS may be exempted by the organization from all CPE requirements in paragraph 4.16.
- **4.27** The audit organization may exempt from the CPE requirements college and university students employed on a temporary basis for a limited period of time (for example, an internship of limited duration) or enrolled in a formal program sponsored by the college or university for a specific period of employment, such as a term or semester.
- **4.28** Employees or contract employees performing support services within the audit organization, such as individuals who are assigned to positions in budgeting, human resources, training, and administrative functions, and who do not conduct engagement activities are not auditors

subject to the GAGAS CPE requirements. Employees or contract employees who assist in the engagement by performing support services, such as performing background research, data entry, writing and editing assistance, proofreading, or report production and distribution are not auditors subject to the GAGAS CPE requirements.

- **4.29** The audit organization, at its discretion, may grant exemptions from a portion of the CPE requirement in the event of extended absences or other extenuating circumstances if situations such as the following prevent auditors from fulfilling those requirements and conducting engagements:
 - **a.** ill health,
 - **b.** maternity or paternity leave,
 - **c.** extended family leave,
 - d. sabbaticals,
 - e. leave without pay absences,
 - f. foreign residency,
 - g. military service, and
 - **h.** disasters.

The audit organization may not grant exceptions for reasons such as workload, budget, or travel constraints.

Application Guidance: Specialists

- **4.30** External specialists are not auditors subject to the GAGAS CPE requirements. Also, internal specialists assisting on a GAGAS engagement who are not involved in planning, directing, performing engagement procedures, or reporting on a GAGAS engagement are not auditors subject to the GAGAS CPE requirements.
- **4.31** Internal specialists who are performing work in accordance with GAGAS as part of the engagement team—including planning, directing, performing engagement procedures, or reporting on a GAGAS engagement—are considered auditors and are subject to the GAGAS

CPE requirements. The GAGAS CPE requirements become effective for internal specialists when an audit organization first assigns an internal specialist to an engagement. Because internal specialists apply specialized knowledge in government engagements, CPE in their areas of specialization qualifies under the requirement for 24 hours of CPE that directly relates to government auditing, the government environment, or the specific or unique environment in which the audited entity operates.

Application Guidance: Programs and Activities That Qualify for CPE

- **4.32** CPE programs are structured educational activities or programs with learning objectives designed to maintain or enhance the auditors' competence to address engagement objectives and perform work in accordance with GAGAS.
- **4.33** The following are examples of structured educational programs and activities:
 - **a.** internal training programs (e.g., courses, seminars, and workshops);
 - education and development programs presented at conferences, conventions, meetings, and seminars and meetings or workshops of professional organizations;
 - **c.** training programs presented by other audit organizations, educational organizations, foundations, and associations;
 - **d.** web-based seminars and individual-study or eLearning programs;
 - e. audio conferences;
 - **f.** accredited university and college courses (credit and noncredit);
 - g. standard-setting organization, professional organization, or audit organization staff meetings when a structured educational program with learning objectives is presented (e.g., the portion of the meeting that is a structured educational program with learning objectives designed to maintain or enhance auditors' competence);
 - h. correspondence courses, individual-study guides, and workbooks;

- i. serving as a speaker, panelist, instructor, or discussion leader at programs that qualify for CPE hours;
- **j.** developing or technical review of courses or the course materials for programs that qualify for CPE hours; and
- **k.** publishing articles and books that contribute directly to the author's professional proficiency to conduct engagements.
- **4.34** Individual auditors who are members of professional organizations or who are licensed professionals, such as certified public accountants, are cautioned that the GAGAS CPE requirements, while similar in many respects to those of professional organizations and of licensing bodies, may not be identical. Some subjects and topics may be acceptable to state licensing bodies or professional organizations, but may not qualify as CPE under GAGAS. Conversely, some CPE that qualifies for GAGAS may not qualify for state licensing bodies or professional organizations. Careful consideration of auditors' relevant professional organizations or licensing body requirements is encouraged to meet other relevant CPE requirements.
- **4.35** Examples of training topics that may qualify as CPE for state licensing bodies or professional organizations but would not generally qualify as CPE for purposes of satisfying requirements under GAGAS include certain training in taxation, personal financial planning and investment, taxation strategies, estate planning, retirement planning, and practice management, unless such training directly enhances the auditors' professional proficiency to perform engagements or relate to the subject matter of an engagement. However, if certain taxation or other topics relate to an objective or the subject matter of an engagement, training in those related topics could qualify as CPE under GAGAS.
- **4.36** Examples of programs and activities that do not qualify for CPE hours under GAGAS include, but are not limited to, the following:
 - **a.** on-the-job training;
 - **b.** basic or elementary courses in subjects or topics in which auditors already have the knowledge and skills being taught;
 - c. programs that are designed for general personal development, such as résumé writing, improving parent-child relations, personal investments and money management, and retirement planning;

- **d.** programs that demonstrate office equipment or software that is not used in conducting engagements;
- **e.** programs that provide training on the audit organization's administrative operations;
- f. business sessions at professional organization conferences, conventions, and meetings that do not have a structured educational program with learning objectives;
- g. conducting external quality control reviews; and
- **h.** sitting for professional certification examinations.

Basic or elementary courses would be acceptable in cases where they are deemed necessary as "refresher" courses to enhance the auditors' proficiency to conduct audits and attestation engagements.

Application Guidance: Measurement of CPE

- **4.37** A CPE hour may be granted for each 50 minutes of participation in programs and activities that qualify.
- **4.38** For university or college credit courses, each unit of college credit under a semester system equals 15 CPE hours, and each unit of college credit under a quarter system equals 10 CPE hours. For university or college noncredit courses, CPE hours may be granted only for the actual classroom time.
- **4.39** For individual-study programs where successful completion is measured by a summary examination, CPE credit may be granted if auditors complete the examination with a passing grade. Auditors in other individual-study programs may earn CPE hours when they satisfactorily complete the requirements of the self-study program. The number of hours granted may be based on the CPE provider's recommended number of CPE hours for the program.
- **4.40** Speakers, instructors, and discussion leaders at programs that qualify for CPE and auditors who develop or write the course materials may receive CPE hours for preparation and presentation time to the extent the subject matter contributes to auditors' competence. One CPE hour may be granted for each 50 minutes of presentation time. Up to 2 CPE hours may be granted for developing, writing, or advance

preparation for each 50 minutes of the presentation. Auditors may not receive CPE hours for either preparation or presentation time for repeated presentations that they make within the 2-year period, unless the subject matter involved was changed significantly for each presentation. The maximum number of CPE hours that may be granted to an auditor as a speaker, instructor, discussion leader, or preparer of course materials may not exceed 40 hours for any 2-year period.

- **4.41** Articles, books, or materials written by auditors and published on subjects and topics that contribute directly to professional proficiency to conduct engagements qualify for CPE hours in the year they are published. One CPE hour may be granted for each hour devoted to writing articles, books, or materials that are published. However, CPE hours for published writings may not exceed 20 hours for any 2-year period.
- **4.42** Auditors hired or assigned to a GAGAS engagement after the beginning of an audit organization's 2-year CPE period may complete a prorated number of CPE hours. An audit organization may define a prorated number of hours based on the number of full 6-month intervals remaining in the CPE period. For example, an audit organization has a 2-year CPE period running from January 1, 2020, through December 31, 2021. The audit organization assigns a new auditor to a GAGAS engagement in May 2020. The audit organization may calculate the prorated CPE requirement for the auditor as follows:
 - a. Number of full 6-month intervals remaining in the CPE period: 3
 - **b.** Number of 6-month intervals in the full 2-year period: 4
 - **c.** Newly assigned auditor's CPE requirement: 3/4 x 80 hours = 60 hours

When auditors are newly hired or newly assigned to GAGAS engagements and have had some previous CPE, the audit organization has flexibility and may choose between using a pro rata approach or evaluating whether and to what extent any CPE already taken in that period would satisfy GAGAS CPE requirements.

4.43 For newly assigned auditors who are subject to the 24-hour requirement, the number of prorated hours may be calculated in a similar manner: $3/4 \times 24$ hours = 18 hours, in this example. The prorated amount of hours would be the total requirement over the partial period. The 20-

hour minimum for each CPE year would not apply when the prorated number of hours is being used to cover a partial 2-year CPE period.

- **4.44** At their discretion, audit organizations may give auditors who have not completed the 80-hour CPE requirement for any 2-year period up to 2 months immediately following the 2-year period to make up the deficiency. Audit organizations may also give auditors who have not completed the 20 hours of CPE in a 1-year period up to 2 months immediately following the 1-year period to make up the deficiency. Any CPE hours completed toward a deficiency in one period may be documented in the CPE records and may not be counted toward the requirements for the next period. Audit organizations that grant the 2-month grace period may not allow auditors who have not satisfied the CPE requirements after the grace period to participate in GAGAS engagements until those requirements are satisfied.
- **4.45** Auditors may not carry over CPE hours earned in excess of the 80-hour and 24-hour requirements from one 2-year CPE measurement period to the next.
- **4.46** If an audit organization discontinues conducting GAGAS engagements or reassigns auditors to non-GAGAS assignments before auditors complete the CPE requirements, the auditors are not required to complete the number of hours to satisfy the CPE requirements. However, the audit organization may wish to have its auditors complete those requirements if it is foreseeable that the auditors will conduct GAGAS engagements in the future.
- **4.47** Auditors who complete a professional certification review course may receive CPE hours only for those segments of the review course that are relevant to the standards, statutory requirements, regulations, criteria, and guidance applicable to auditing or to the engagement objectives being performed, or for subject matter that directly enhances auditors' professional expertise to conduct engagements.
- **4.48** To simplify administration of the CPE requirements, an audit organization may establish a standard 2-year period for all of its auditors, which can be on either a fixed-year or rolling-year basis. A fixed-year measurement period, for example, would be the 2-year periods 2019 through 2020, 2021 through 2022, and so forth, while a rolling-year measurement period would be 2019 through 2020, 2020 through 2021, 2021 through 2022, and so forth.

4.49 An audit organization may use a measurement date other than the date it started its first GAGAS engagement, or the audit organization may choose to change its measurement date to coincide with a fiscal year or another reporting requirement, such as one established by a state licensing body or professional organization. For example, if an audit organization changes the end date of the measurement period from December 31 to June 30, during the audit organization's transition period (January 1 to June 30), its auditors may complete at least a prorated number of CPE hours for the 6-month transition period. The number of prorated hours required may be calculated using the method illustrated in paragraphs 4.42 and 4.43.

Application Guidance: Monitoring CPE

- **4.50** The audit organization's policies and procedures for CPE may address the following:
 - **a.** identifying all auditors required to meet the CPE requirements;
 - **b.** providing auditors with the opportunity to attend internal CPE programs, external CPE programs, or both;
 - **c.** assisting auditors in determining which programs, activities, and subjects qualify for CPE;
 - **d.** documenting the number of CPE hours completed by each auditor; and
 - e. monitoring auditor compliance with the CPE requirements to ensure that auditors complete sufficient CPE in qualifying programs and subjects.
- **4.51** Policies and procedures for documentation may address maintaining documentation of the CPE hours completed by each auditor subject to the CPE requirements for an appropriate period of time to satisfy any legal and administrative requirements, including peer review. The audit organization may maintain documentation of CPE or may delegate the responsibility to the auditor and put in place adequate procedures to ensure that its records of CPE hours earned by auditors are supported by the documentation maintained by auditors. Documentation may include the following information:
 - **a.** the name of the organization providing the CPE;

- **b.** the title of the training program, including the subject matter or field of study;
- **c.** the dates attended for group programs or dates completed for individual study programs;
- **d.** the number of CPE hours earned toward the 56-hour and 24-hour requirements;
- **e.** any reasons for specific exceptions granted to the CPE requirement; and
- f. evidence of completion of CPE, such as a certificate or other evidence of completion from the CPE provider for group and individual-study programs, if provided; documentation of CPE courses presented or copies of course materials developed by or for speakers, instructors, or discussion leaders, along with a written statement supporting the number of CPE hours claimed; or a copy of the published book, article, or other material that name the writer as author or contributor, or a written statement from the writer supporting the number of CPE hours claimed.
- **4.52** The audit organization may monitor CPE compliance through its internal inspections or other quality assurance monitoring activities.
- **4.53** The audit organization is not required to prepare reports on CPE. However, the audit organization may consider preparing a periodic CPE report for distribution to the auditors or maintaining or accessing training data online to monitor its auditors' progress toward meeting the CPE requirements.

Chapter 5: Quality Control and Peer Review

5.01 This chapter establishes the generally accepted government auditing standards (GAGAS) requirements and guidance for quality control and assurance, and for administering, planning, performing, and reporting on peer reviews of audit organizations that conduct engagements in accordance with GAGAS. The requirements of this chapter are intended to be followed in conjunction with those of all other applicable GAGAS requirements.

Quality Control and Assurance

Requirement: Quality Control and Assurance

5.02 An audit organization conducting engagements in accordance with GAGAS must establish and maintain a system of quality control that is designed to provide the audit organization with reasonable assurance that the organization and its personnel comply with professional standards and applicable legal and regulatory requirements.

Application Guidance: Quality Control and Assurance

5.03 An audit organization's system of quality control encompasses the organization's leadership, emphasis on performing high-quality work, and policies and procedures designed to provide reasonable assurance of complying with professional standards and applicable legal and regulatory requirements. The nature, extent, and formality of an audit organization's quality control system will vary based on the audit organization's circumstances, such as size, number of offices and geographic dispersion, knowledge and experience of its personnel, nature and complexity of its engagement work, and cost-benefit considerations.

System of Quality Control

Requirement: System of Quality Control

5.04 An audit organization should document its quality control policies and procedures and communicate those policies and procedures to its personnel. The audit organization should document compliance with its quality control policies and procedures and maintain such documentation for a period of time sufficient to enable those performing monitoring procedures and peer reviews to evaluate the

extent to which the audit organization complies with its quality control policies and procedures.

Leadership Responsibilities for Quality within the Audit Organization

Requirements: Leadership Responsibilities for Quality within the Audit Organization

- **5.05** The audit organization should establish policies and procedures on leadership responsibilities for quality within the audit organization that include designating responsibility for quality of engagements conducted in accordance with GAGAS and communicating policies and procedures relating to quality.
- **5.06** The audit organization should establish policies and procedures designed to provide reasonable assurance that those assigned operational responsibility for the audit organization's system of quality control have sufficient and appropriate experience and ability, and the necessary authority, to assume that responsibility.

Application Guidance: Leadership Responsibilities for Quality within the Audit Organization

5.07 Appropriate policies and communications encourage a culture that recognizes that quality is essential in conducting GAGAS engagements and that audit organization leadership is ultimately responsible for the system of quality control.

Independence, Legal, and Ethical Requirements

Requirements: Independence, Legal, and Ethical Requirements

5.08 The audit organization should establish policies and procedures on independence and legal and ethical requirements that are designed to provide reasonable assurance that the organization and its

personnel maintain independence and comply with applicable legal and ethical requirements.³⁵

5.09 At least annually, the audit organization should obtain written affirmation of compliance with its policies and procedures on independence from all of its personnel required to be independent.

Application Guidance: Independence, Legal, and Ethical Requirements

- **5.10** Policies and procedures pertaining to independence and legal and ethical requirements assist the audit organization in
 - **a.** communicating its independence requirements to its personnel and
 - b. identifying and evaluating circumstances and relationships that create threats to independence and taking appropriate action to eliminate those threats or reduce them to an acceptable level by applying safeguards or, if considered appropriate, withdrawing from the engagement where withdrawal is not prohibited by law or regulation.
- **5.11** Written affirmation of compliance with its policies and procedures on independence from all audit organization personnel required to be independent may be in paper or electronic form. By obtaining affirmation of retrospective compliance with the audit organization's policies and procedures on independence during a specified period and taking appropriate action on information indicating noncompliance, or potential noncompliance, the organization demonstrates the importance that it attaches to independence and keeps the issue current for, and visible to, its personnel. An audit organization may obtain affirmation of required personnel's compliance with policies and procedures on independence more frequently than once per year. For example, affirmation may be obtained on a per-engagement basis when such engagements last less than 1 year.

³⁵See paras. 3.02 through 3.16 for a discussion of ethical principles and paras. 3.18 through 3.108 for independence requirements and guidance.

Initiation, Acceptance, and Continuance of Engagements

Requirement: Initiation, Acceptance, and Continuance of Engagements

- **5.12** The audit organization should establish policies and procedures for the initiation, acceptance, and continuance of engagements that are designed to provide reasonable assurance that the organization will undertake engagements only if it
 - **a.** complies with professional standards, applicable legal and regulatory requirements, and ethical principles;
 - **b.** acts within its legal mandate or authority; and
 - **c.** has the capabilities, including time and resources, to do so.

Application Guidance: Initiation, Acceptance, and Continuance of Engagements

- **5.13** Government audit organizations initiate engagements as a result of (1) legal mandates, (2) requests from legislative bodies or oversight bodies, and (3) audit organization discretion. In the case of legal mandates and requests, a government audit organization may be required to conduct the engagement and may not be permitted to make decisions about acceptance or continuance and may not be permitted to resign or withdraw from the engagement.
- **5.14** Audit organizations may operate with limited resources. Audit organizations may consider their workloads in determining whether they have the resources to deliver the range of work to the desired level of quality. To achieve this, audit organizations may develop systems to prioritize their work in a way that takes into account the need to maintain quality.

Human Resources

Requirements: Human Resources

5.15 The audit organization should establish policies and procedures for human resources that are designed to provide the organization with reasonable assurance that it has personnel with the competence to conduct GAGAS engagements in accordance with professional

standards and applicable legal and regulatory requirements.³⁶

5.16 The audit organization should establish policies and procedures to provide reasonable assurance that auditors who are performing work in accordance with GAGAS meet the continuing professional education (CPE) requirements, including maintaining documentation of the CPE completed and any exemptions granted.

Application Guidance: Human Resources

- **5.17** Effective recruitment processes and procedures help the audit organization select individuals of integrity who have the capacity to develop the competence and capabilities necessary to perform the audit organization's work and possess the appropriate characteristics to enable them to perform competently. Examples of such characteristics include meeting minimum academic requirements established by the audit organization and leadership traits.
- **5.18** The audit organization may use a suitably qualified external person to conduct engagement work when internal resources, for example, personnel with particular areas of technical expertise, are unavailable.
- **5.19** Effective performance evaluation, compensation, and advancement procedures give due recognition and reward to developing and maintaining competent personnel. Steps that an audit organization may take in developing and maintaining competent personnel include the following:
 - **a.** making personnel aware of the audit organization's expectations regarding performance and ethical principles;
 - **b.** providing personnel with an evaluation of, and counseling on, performance, progress, and career development; and
 - c. helping personnel understand that compensation and advancement to positions of greater responsibility depend on, among other things, performance quality, and that failure to

³⁶Refer to paras. 4.02 through 4.15 for requirements and guidance on competence.

comply with the audit organization's policies and procedures may result in disciplinary action.

- **5.20** The size and circumstances of the audit organization are important considerations in determining the structure of the audit organization's performance evaluation process. A smaller audit organization, in particular, may employ less formal methods of evaluating the performance of its personnel.
- **5.21** Objectives of the audit organization's human resources policies and procedures may include
 - **a.** promoting learning and training for all personnel to encourage their professional development and to help ensure that personnel are trained in current developments in the profession and
 - b. helping ensure that personnel and any parties contracted to carry out work for the audit organization have an appropriate understanding of the environment(s) in which the organization operates and a good understanding of the work they are required to carry out.

Engagement Performance

Requirements: General

- **5.22** The audit organization should establish policies and procedures for engagement performance, documentation, and reporting that are designed to provide the audit organization with reasonable assurance that engagements are conducted and reports are issued in accordance with professional standards and applicable legal and regulatory requirements.
- **5.23** If auditors change the engagement objectives during the engagement, they should document the revised engagement objectives and the reasons for the changes.
- **5.24** The audit organization should establish policies and procedures designed to provide it with reasonable assurance that
 - **a.** appropriate consultation takes place on difficult or contentious issues that arise among engagement team members in the

course of conducting a GAGAS engagement;

- both the individual seeking consultation and the individual consulted document and agree upon the nature and scope of such consultations; and
- **c.** the conclusions resulting from consultations are documented, understood by both the individual seeking consultation and the individual consulted, and implemented.
- **5.25** If an engagement is terminated before it is completed and an audit report is not issued, auditors should document the results of the work to the date of termination and why the engagement was terminated.

Application Guidance: General

- **5.26** The audit organization's policies and procedures may address consistency in the quality of engagement performance. This is often accomplished through written or electronic manuals, software tools or other forms of standardized documentation, and industry-specific or subject matter-specific guidance materials. Matters addressed may include the following:
 - **a.** maintaining current policies and procedures;
 - **b.** briefing the engagement team to provide an understanding of the engagement objectives and professional standards;
 - **c.** complying with applicable engagement standards;
 - **d.** planning the engagement, supervision, staff training, and mentoring;
 - **e.** reviewing the work performed, the significant judgments made, and the type of report being issued;
 - **f.** documenting the work performed and the timing and extent of review;
 - **g.** reviewing the independence and qualifications of any specialists and the scope and quality of their work;

- **h.** resolving difficult or contentious issues or disagreements among team members, including specialists;
- obtaining and addressing comments from the audited entity on draft reports; and
- j. reporting findings and conclusions supported by the evidence obtained and in accordance with professional standards and applicable legal and regulatory requirements.
- **5.27** The form and content of the documentation of the audit organization's policies and procedures, as well as documentation of its compliance with those policies and procedures, are matters of professional judgment and will vary based on the organization's circumstances.
- **5.28** Documentation of policies and procedures, as well as compliance with those policies and procedures, may be either electronic or manual. For example, large audit organizations may use electronic databases to document matters such as independence confirmations, performance evaluations, and the results of monitoring. Smaller audit organizations may use more informal methods in the documentation of their systems of quality control, such as manual notes, checklists, and forms.
- **5.29** Consultation includes discussion at the appropriate professional level with individuals within or outside the audit organization who have relevant specialized expertise.
- **5.30** Consultation uses appropriate research resources, as well as the collective experience and technical expertise of the audit organization. Consultation helps promote quality and improves the application of professional judgment. Appropriate recognition of consultation in the audit organization's policies and procedures helps promote a culture in which consultation is recognized as a strength and personnel are encouraged to consult on difficult or contentious issues.
- **5.31** Effective consultation on significant technical, ethical, and other matters within the audit organization or, when applicable, outside the audit organization can be achieved when
 - **a.** those consulted are given all the relevant facts that will enable them to provide informed advice;

- **b.** those consulted have appropriate knowledge, authority, and experience; and
- **c.** conclusions resulting from consultations are appropriately documented and implemented.
- **5.32** Documentation of consultations with other professionals that involve difficult or contentious matters contributes to an understanding of
 - a. the issue on which consultation was sought and
 - **b.** the results of the consultation, including any decisions made, the basis for those decisions, and how they were implemented.
- **5.33** An audit organization needing to obtain specialized or technical expertise from external providers may take advantage of services provided by
 - a. other audit organizations,
 - **b.** professional and regulatory bodies, and
 - **c.** commercial organizations that provide relevant quality control services.
- **5.34** Before contracting for services, consideration of the competence and capabilities of the external provider helps the audit organization determine whether the external provider is suitably qualified for that purpose.
- **5.35** Determining whether and how to communicate the reason for terminating an engagement or changing the engagement objectives to those charged with governance, appropriate officials of the audited entity, the entity contracting for or requesting the engagement, and other appropriate officials will depend on the facts and circumstances and therefore is a matter of professional judgment.

Requirements: Supervision

5.36 The audit organization should establish policies and procedures that require engagement team members with appropriate levels of skill and proficiency in auditing to supervise engagements and review work

performed by other engagement team members.

- **5.37** The audit organization should assign responsibility for each engagement to an engagement partner or director with authority designated by the audit organization to assume that responsibility and should establish policies and procedures requiring the organization to
 - **a.** communicate the identity and role of the engagement partner or director to management and those charged with governance of the audited entity and
 - **b.** clearly define the responsibilities of the engagement partner or director and communicate them to that individual.

Application Guidance: Supervision

- **5.38** Appropriate teamwork and training help less experienced members of the engagement team to clearly understand the objectives of the assigned work.
- **5.39** Engagement supervision includes the following:
 - **a.** tracking the progress of the engagement;
 - b. considering the competence of individual members of the engagement team, whether they understand their instructions, and whether the work is being carried out in accordance with the planned approach to the engagement;
 - addressing significant findings and issues arising during the engagement, considering their significance, and modifying the planned approach appropriately; and
 - **d.** identifying matters for consultation or consideration by engagement team members with appropriate levels of skill and proficiency in auditing, specialists, or both during the engagement.
- **5.40** A review of the work performed includes consideration of whether
 - **a.** the work has been performed in accordance with professional standards and applicable legal and regulatory requirements;

- **b.** significant findings and issues have been raised for further consideration;
- **c.** appropriate consultations have taken place and the resulting conclusions have been documented and implemented;
- **d.** the nature, timing, and extent of the work performed is appropriate and without need for revision;
- **e.** the work performed supports the conclusions reached and is appropriately documented;
- **f.** the evidence obtained is sufficient and appropriate to support the report; and
- **g.** the objectives of the engagement procedures have been achieved.
- **5.41** In the case of a sole proprietor, the requirement for a second auditor to review work performed and related documentation may be achieved through alternative procedures.

Monitoring of Quality

Requirements: Monitoring of Quality

- **5.42** The audit organization should establish policies and procedures for monitoring its system of quality control.
- **5.43** The audit organization should perform monitoring procedures that enable it to assess compliance with professional standards and quality control policies and procedures for GAGAS engagements. Individuals performing monitoring should have sufficient expertise and authority within the audit organization.
- **5.44** The audit organization should analyze and summarize the results of its monitoring process at least annually, with identification of any systemic or repetitive issues needing improvement, along with recommendations for corrective action. The audit organization should communicate to the relevant engagement partner or director, and other appropriate personnel, any deficiencies noted during the monitoring process and recommend appropriate remedial action. This

communication should be sufficient to enable the audit organization and appropriate personnel to take prompt corrective action related to deficiencies, when necessary, in accordance with their defined roles and responsibilities. Information communicated should include the following:

- **a.** a description of the monitoring procedures performed;
- **b.** the conclusions reached from the monitoring procedures; and
- c. when relevant, a description of systemic, repetitive, or other deficiencies and of the actions taken to resolve those deficiencies.
- **5.45** The audit organization should evaluate the effects of deficiencies noted during monitoring of the audit organization's system of quality control to determine and implement appropriate actions to address the deficiencies. This evaluation should include assessments to determine if the deficiencies noted indicate that the audit organization's system of quality control is insufficient to provide it with reasonable assurance that it complies with professional standards and applicable legal and regulatory requirements, and that accordingly the reports that the audit organization issues are not appropriate in the circumstances.
- **5.46** The audit organization should establish policies and procedures that require retention of engagement documentation for a period of time sufficient to permit those performing monitoring procedures and peer review of the organization to evaluate its compliance with its system of quality control or for a longer period if required by law or regulation.

Application Guidance: Monitoring of Quality

5.47 Monitoring of quality is a process comprising an ongoing consideration and evaluation of the audit organization's system of quality control, including inspection of engagement documentation and reports for a selection of completed engagements. The purpose of monitoring is to provide management of the audit organization with reasonable assurance that (1) the policies and procedures related to the system of quality control are suitably designed and operating effectively in practice and (2) auditors have followed professional standards and applicable legal and regulatory requirements.

- **5.48** Monitoring is most effective when performed by persons who do not have responsibility for the specific activity being monitored.
- **5.49** Monitoring procedures will vary based on the audit organization's facts and circumstances.
- **5.50** Ongoing consideration and evaluation of the audit organization's system of quality control may identify circumstances that necessitate changes to, or improve compliance with, the audit organization's policies and procedures to provide the audit organization with reasonable assurance that its system of quality control is effective.
- **5.51** Ongoing consideration and evaluation of the audit organization's system of quality control may include matters such as the following:
 - **a.** review of selected administrative and human resource records pertaining to the quality control elements;
 - **b.** review of engagement documentation and reports;
 - **c.** discussions with the audit organization's personnel;
 - d. determination of corrective actions to be taken and improvements to be made in the system, including providing feedback on the audit organization's policies and procedures relating to education and training;
 - e. communication to appropriate audit organization personnel of weaknesses identified in the system, in the level of understanding of the system, or compliance with the system; and
 - **f.** follow-up by appropriate audit organization personnel so that necessary modifications are promptly made to the quality control policies and procedures.
- **5.52** Monitoring procedures may also include an assessment of the following:
 - **a.** the appropriateness of the audit organization's guidance materials and any practice aids;

- **b.** new developments in professional standards and applicable legal and regulatory requirements and how they are reflected in the audit organization's policies and procedures, when appropriate;
- **c.** written affirmation of compliance with policies and procedures on independence;
- **d.** the effectiveness of staff training;
- decisions related to acceptance and continuance of relationships with audited entities and specific engagements; and
- f. audit organization personnel's understanding of the organization's quality control policies and procedures and implementation thereof.
- **5.53** Reviews of the work by engagement team members prior to the date of the report are not monitoring procedures.
- **5.54** The extent of inspection procedures depends, in part, on the existence and effectiveness of the other monitoring procedures. Inspection is a retrospective evaluation of the adequacy of the audit organization's quality control policies and procedures, its personnel's understanding of those policies and procedures, and the extent of the audit organization's compliance with them. The nature of inspection procedures varies based on the audit organization's quality control policies and procedures and the effectiveness and results of other monitoring procedures.
- **5.55** The inspection of a selection of completed engagements may be performed on a cyclical basis. The manner in which the inspection cycle is organized, including the timing of selection of individual engagements, depends on many factors, such as the following:
 - **a.** the size of the audit organization;
 - **b.** the number and geographical location of offices;
 - **c.** the results of previous monitoring procedures;
 - d. the degree of authority of both personnel and office (for example, whether individual offices are authorized to conduct their own inspections or whether only the head office may conduct them);

- **e.** the nature and complexity of the audit organization's practice and structure; and
- **f.** the risks associated with entities audited by the audit organization and specific engagements.
- **5.56** The inspection process involves the selection of individual engagements, some of which may be selected without prior notification to the engagement team. In determining the scope of the inspections, the audit organization may take into account the scope or conclusions of a peer review or regulatory inspections.
- **5.57** Reporting of identified deficiencies to individuals other than the relevant engagement partner or director need not include identifying the specific engagements concerned, unless such identification is necessary for individuals other than the engagement partner or director to properly discharge their responsibilities.
- **5.58** Whether engagement documentation is in paper, electronic, or other form, the integrity, accessibility, and retrievability of the underlying information could be compromised if the documentation is altered, added to, or deleted without the auditors' knowledge or if the documentation is lost or damaged.
- **5.59** Appropriate documentation relating to monitoring may include, for example, the following:
 - **a.** monitoring procedures, including the procedure for selecting completed engagements to be inspected;
 - **b.** a record of the evaluation of the following:
 - (1) adherence to professional standards and applicable legal and regulatory requirements,
 - (2) whether the system of quality control has been appropriately designed and is effectively implemented and operating, and
 - (3) whether the audit organization's quality control policies and procedures have been appropriately applied so that the reports that are issued by the audit organization are appropriate in the circumstances; and

c. identification of the deficiencies noted, an evaluation of their effect, and the basis for determining whether and what further action is necessary.

External Peer Review

Requirements: General

- **5.60** Each audit organization conducting engagements in accordance with GAGAS must obtain an external peer review conducted by reviewers independent of the audit organization being reviewed. The peer review should be sufficient in scope to provide a reasonable basis for determining whether, for the period under review, (1) the reviewed audit organization's system of quality control was suitably designed and (2) the organization is complying with its quality control system so that it has reasonable assurance that it is performing and reporting in conformity with professional standards and applicable legal and regulatory requirements in all material respects.
- **5.61** Audit organizations affiliated with one of the following recognized organizations should comply with the respective organization's peer review requirements and the requirements listed throughout paragraphs 5.66 through 5.80.
 - a. American Institute of Certified Public Accountants
 - **b.** Council of the Inspectors General on Integrity and Efficiency
 - c. Association of Local Government Auditors
 - **d.** International Organization of Supreme Audit Institutions
 - e. National State Auditors Association
- **5.62** Any audit organization not affiliated with an organization listed in paragraph 5.61 should meet the minimum GAGAS peer review requirements throughout paragraphs 5.66 through 5.94.

Application Guidance: General

5.63 Each audit organization has discretion in selecting and accepting its peer review teams. Auditors in governments or jurisdictions without access to established peer review programs may engage other auditors,

including public accounting firms, to conduct their peer reviews. If access to an established peer review program is not available, auditors may organize regional programs with other auditors.

- **5.64** In cases of unusual difficulty or hardship, extensions of the deadlines for submitting peer review reports exceeding 3 months beyond the due date may be granted by the entity that administers the peer review program with the concurrence of GAO.
- **5.65** Some audit organizations may be subject to or required to follow a peer review program of a recognized organization. Other audit organizations may follow a specific peer review program voluntarily. In instances where the audit organization follows a recognized organization's peer review program voluntarily, the use of such a peer review program means compliance with the recognized organization's entire peer review process, including, where applicable, standards for administering, performing, and reporting on peer reviews, oversight procedures, training, and related guidance materials.

Requirements: Assessment of Peer Review Risk

- **5.66** The peer review team should perform an assessment of peer review risk to help determine the number and types of engagements to select for review.
- **5.67** Based on the risk assessment, the peer review team should select engagements that provide a reasonable cross section of all types of work subject to the reviewed audit organization's quality control system, including one or more engagements conducted in accordance with GAGAS.

Application Guidance: Assessment of Peer Review Risk

- **5.68** Peer review risk is the risk that the review team
 - a. fails to identify significant weaknesses in the reviewed audit organization's system of quality control for its auditing practice, its lack of compliance with that system, or a combination thereof;
 - **b.** issues an inappropriate opinion on the reviewed audit organization's system of quality control for its auditing practice, its compliance with that system, or a combination thereof; or

- **c.** makes an inappropriate decision about the matters to be included in, or excluded from, the peer review report.
- **5.69** A selection approach that provides a cross section of all types of work is generally applicable to audit organizations that conduct a small number of GAGAS engagements in relation to other types of engagements. In these cases, one or more GAGAS engagements may represent more than what would be selected when looking at a cross section of the audit organization's work as a whole. Some audit organizations conduct audit and attestation work in a number of functional areas. For example, an organization may conduct financial audits, attestation engagements, reviews of financial statements, and performance audits. The peer review team may consider reviewing a sample of engagements from each of the major functional areas included within the scope of the review.
- **5.70** A peer review is designed to test significant risk areas where it is possible that engagements are not being conducted, reported on, or both in conformity with professional standards and applicable legal and regulatory requirements in all material respects. A peer review is not designed to test every engagement, compliance with every professional standard, or every detailed component of the audit organization's system of quality control.
- **5.71** Examples of the factors that may be considered when performing an assessment of risk for selecting engagements for peer review include
 - **a.** scope of the engagements, including size of the audited entity or engagements covering multiple locations;
 - **b.** functional area or type of government program;
 - **c.** types of engagements conducted, including the extent of nonaudit services provided to audited entities:
 - **d.** personnel (including use of new personnel or personnel not routinely assigned the types of engagements conducted);
 - e. initial engagements;
 - **f.** familiarity resulting from a long-standing relationship with the audited entity;

- **g.** political sensitivity of the engagements;
- **h.** budget constraints faced by the audit organization that could negatively affect engagement quality;
- results of the peer review team's review of the design of system of quality control;
- i. results of the audit organization's monitoring process; and
- **k.** overall risk tolerance within the audit organization that could negatively affect engagement quality.

Requirements: Peer Review Report Ratings

- **5.72** The peer review team should use professional judgment in deciding on the type of peer review rating to issue; the ratings are as follows:
 - a. Peer review rating of pass: A conclusion that the audit organization's system of quality control has been suitably designed and complied with to provide the audit organization with reasonable assurance of performing and reporting in conformity with professional standards and applicable legal and regulatory requirements in all material respects.
 - b. Peer review rating of pass with deficiencies: A conclusion that the audit organization's system of quality control has been suitably designed and complied with to provide the audit organization with reasonable assurance of performing and reporting in conformity with professional standards and applicable legal and regulatory requirements in all material respects with the exception of a certain deficiency or deficiencies described in the report.
 - c. Peer review rating of fail: A conclusion, based on the significant deficiencies described in the report, that the audit organization's system of quality control is not suitably designed to provide the audit organization with reasonable assurance of performing and reporting in conformity with professional standards and applicable legal and regulatory requirements in all material respects, or that the audit organization has not complied with its

system of quality control to provide the audit organization with reasonable assurance of performing and reporting in conformity with professional standards and applicable legal and regulatory requirements in all material respects.

- **5.73** The peer review team should determine the type of peer review rating to issue based on the observed matters' importance to the audit organization's system of quality control as a whole and the nature, causes, patterns, and pervasiveness of those matters. The matters should be assessed both alone and in aggregate.
- **5.74** The peer review team should aggregate and systematically evaluate any observed matters (circumstances that warrant further consideration by the peer review team) and document its evaluation.³⁷ The peer review team should perform its evaluation and issue report ratings as follows:
 - a. If the peer review team's evaluation of observed matters does not identify any findings (more than a remote possibility that the reviewed audit organization would not perform, report, or both in conformity with professional standards and applicable legal and regulatory requirements), or identifies findings that are not considered to be deficiencies, the peer review team issues a pass rating.
 - b. If the peer review team's evaluation of findings identified deficiencies but did not identify any significant deficiencies, the peer review team issues a pass with deficiencies rating and communicates the deficiencies in its report.
 - c. If the peer review team's evaluation of deficiencies identified significant deficiencies, the peer review team issues a fail rating and communicates the deficiencies and significant deficiencies in its report.

³⁷See fig. 3 for a flowchart on developing peer review communications for observed matters in accordance with GAGAS.

Application Guidance: Peer Review Report Ratings

- **5.75** Deficiencies are findings that because of their nature, causes, pattern, or pervasiveness, including their relative importance to the audit organization's system of quality control taken as a whole, could create a situation in which the audit organization would not have reasonable assurance of performing, reporting, or both in conformity with professional standards and applicable legal and regulatory requirements in one or more important respects.
- **5.76** Significant deficiencies are one or more deficiencies that the peer review team concludes result from a condition in the audit organization's system of quality control or compliance with that system such that the system taken as a whole does not provide reasonable assurance of performing, reporting, or both in conformity with professional standards and applicable legal and regulatory requirements.

Requirements: Availability of the Peer Review Report to the Public

- **5.77** An external audit organization should make its most recent peer review report publicly available. If a separate communication detailing findings, conclusions, and recommendations is issued, the external audit organization is not required to make that communication publicly available. An internal audit organization that reports internally to management and those charged with governance should provide a copy of its peer review report to those charged with governance.
- **5.78** An external audit organization should satisfy the publication requirement for its peer review report by posting the report on a publicly available website or to a publicly available file. Alternatively, if neither of these options is available, then the audit organization should use the same mechanism it uses to make other reports or documents public.
- **5.79** Because information in peer review reports may be relevant to decisions on procuring audit services, an audit organization seeking to enter into a contract to conduct an engagement in accordance with GAGAS should provide the following to the party contracting for such services when requested:

- a. the audit organization's most recent peer review report and
- **b.** any subsequent peer review reports received during the period of the contract.
- **5.80** Auditors who are using another audit organization's work should request a copy of that organization's most recent peer review report, and the organization should provide this document when it is requested.

Application Guidance: Availability of the Peer Review Report to the Public

- **5.81** To help the public understand the peer review reports, an audit organization may include a description of the peer review process and how it applies to its organization. Examples of additional information that audit organizations may include to help users understand the meaning of the peer review report follow:
 - **a.** Explanation of the peer review process.
 - **b.** Description of the audit organization's system of quality control.
 - **c.** Explanation of the relationship of the peer review results to the audited organization's work.
 - d. If a peer review report is issued with a rating of pass with deficiencies or fail, explanation of the reviewed audit organization's plan for improving quality controls and the status of the improvements.

Additional Requirements for Audit Organizations Not Affiliated with Recognized Organizations

Requirement: Peer Review Scope

- **5.82** The peer review team should include the following elements in the scope of the peer review:
 - **a.** review of the audit organization's design of, and compliance with, quality control and related policies and procedures;

- **b.** consideration of the adequacy and results of the audit organization's internal monitoring procedures;
- c. review of selected audit reports and related documentation and, if applicable, documentation related to selected terminated engagements prepared in accordance with paragraph 5.25, if any terminated engagements are selected from the universe of engagements used for the peer review sample;
- **d.** review of prior peer review reports, if applicable;
- review of other documents necessary for assessing compliance with standards, for example, independence documentation, CPE records, and relevant human resource management files; and
- f. interviews with selected members of the audit organization's personnel in various roles to assess their understanding of and compliance with relevant quality control policies and procedures.

Application Guidance: Peer Review Scope

5.83 Review of documentation related to terminated engagements can provide information on the audit organization's response to threats to independence. For example, the documentation may include information on whether an engagement was terminated as a result of an undue influence from outside the audit organization.

Requirement: Peer Review Intervals

5.84 An audit organization not already subject to a peer review requirement should obtain an external peer review at least once every 3 years. The audit organization should obtain its first peer review covering a review period ending no later than 3 years from the date an audit organization begins its first engagement in accordance with GAGAS.

Application Guidance: Peer Review Intervals

5.85 The period under review in a peer review generally covers 1 year.

Requirement: Written Agreement for Peer Review

5.86 The peer review team and the reviewed audit organization should incorporate their basic agreement on the peer review into a written agreement. The written agreement should be drafted by the peer review team, reviewed by the reviewed audit organization to ensure that it accurately describes the agreement between the parties, and signed by the authorized representatives of both the peer review team and the reviewed audit organization prior to the initiation of work under the agreement. The written agreement should state that the peer review will be conducted in accordance with GAGAS peer review requirements.

Application Guidance: Written Agreement for Peer Review

- **5.87** The written agreement is meant to ensure mutual consent on the fundamental aspects of the peer review and to avoid any potential misunderstandings. The written agreement may address the following:
 - **a.** scope of the peer review;
 - b. staffing and time frame;
 - **c.** compensation for conducting the peer review, if applicable;
 - d. preliminary findings, if applicable;
 - e. reporting results;
 - **f.** administrative matters: and
 - **g.** access to audit documentation.
- **5.88** The peer review team is responsible for ensuring that the peer review is conducted in accordance with GAGAS peer review requirements.

Requirement: Peer Review Team

5.89 The peer review team should meet the following criteria:

- a. The review team collectively has adequate professional competence and knowledge of GAGAS and government auditing.
- **b.** The organization conducting the peer review and individual review team members are independent (as defined in GAGAS) of the audit organization being reviewed, its personnel, and the engagements selected for the peer review.³⁸
- **c.** The review team collectively has sufficient knowledge to conduct a peer review.

Application Guidance: Peer Review Team

5.90 Peer review knowledge and professional competence may be obtained from on-the-job training, training courses, or a combination of both. Having individuals on the peer review team with prior experience on a peer review or internal inspection team is desirable.

Requirement: Report Content

- **5.91** The peer review team should prepare one or more written reports communicating the results of the peer review, which collectively include the following elements:
 - **a.** a description of the scope of the peer review, including any limitations;
 - b. a rating concluding on whether the system of quality control of the reviewed audit organization was adequately designed and complied with during the period reviewed and would provide the audit organization with reasonable assurance that it conformed to professional standards and applicable legal and regulatory

³⁸See paras. 3.18 through 3.108 for discussion of independence.

requirements;

- specification of the professional standards and applicable legal and regulatory requirements to which the reviewed audit organization is being held;
- **d.** reference to a separate written communication, if issued under the peer review program;
- **e.** a statement that the peer review was conducted in accordance with GAGAS peer review requirements; and
- **f.** a detailed description of the findings, conclusions, and recommendations related to any deficiencies or significant deficiencies identified in the review.

Application Guidance: Report Content

5.92 When the scope of the peer review is limited by conditions that preclude the application of one or more peer review procedures considered necessary in the circumstances and the peer review team cannot accomplish the objectives of those procedures through alternative procedures, the report can be modified by including a statement in the report's scope paragraph, body, and opinion paragraph. The statement describes the relationship of the excluded engagement(s) or functional area(s) to the reviewed audit organization's full scope of practice as a whole and system of quality control and the effects of the exclusion on the scope and results of the review.

Requirements: Audit Organization's Response to the Peer Review Report

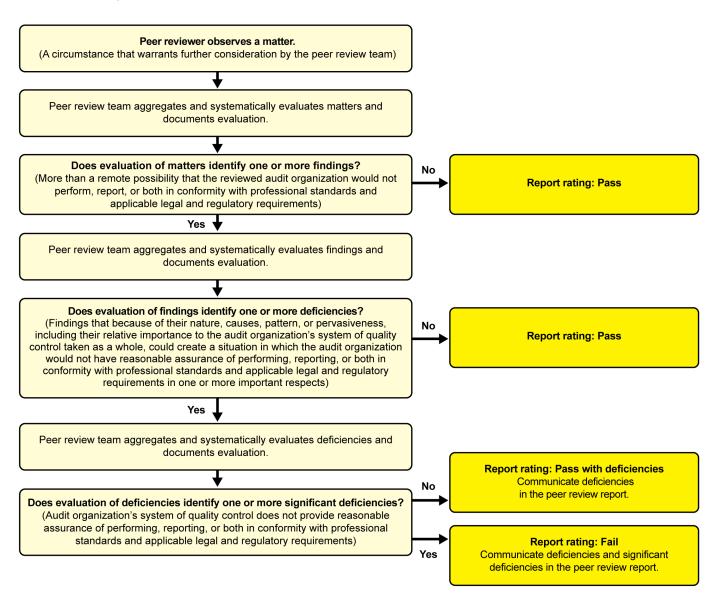
- **5.93** If the reviewed audit organization receives a report with a peer review rating of pass with deficiencies or fail, the reviewed audit organization should respond in writing to the deficiencies or significant deficiencies and related recommendations identified in the report.
- **5.94** With respect to each deficiency or significant deficiency in the report, the reviewed audit organization should describe in its letter of response the corrective actions already taken, target dates for planned corrective actions, or both.

Chapter 5: Quality Control and Peer Review

Application Guidance: Audit Organization's Response to the Peer Review Report

5.95 When an audit organization receives a peer review rating of pass with deficiencies or fail that relates to its GAGAS engagements, critical evaluation of the design and implementation of the system of quality control is a factor in determining the audit organization's ability to accept and perform future GAGAS engagements.

Figure 3: Developing Peer Review Communications for Observed Matters in Accordance with Generally Accepted Government Auditing Standards



Source: GAO. | GAO-18-568G

Chapter 6: Standards for Financial Audits

6.01 This chapter contains requirements and guidance for conducting and reporting on financial audits conducted in accordance with generally accepted government auditing standards (GAGAS). GAGAS incorporates by reference the American Institute of Certified Public Accountants' (AICPA) Statements on Auditing Standards (SAS). ³⁹ All sections of the SAS are incorporated, including the introduction, objectives, definitions, requirements, and application material. GAGAS does not incorporate the AICPA Code of Professional Conduct by reference but recognizes that certain certified public accountants (CPA) may use or may be required to use the code in conjunction with GAGAS. ⁴⁰ For financial audits conducted in accordance with GAGAS, the requirements and guidance in the incorporated SAS and this chapter apply. The requirements and guidance contained in chapters 1 through 5 also apply.

Additional GAGAS Requirements for Conducting Financial Audits

Compliance with Standards

Requirement: Compliance with Standards

6.02 GAGAS establishes requirements for financial audits in addition to the requirements in the AICPA SAS. Auditors should comply with these additional requirements, along with the AICPA requirements for financial audits, when citing GAGAS in financial audit reports.

Application Guidance: Compliance with Standards

6.03 Standards used in conjunction with GAGAS require the auditors to apply the concept of materiality appropriately in planning and performing the audit.⁴¹ Additional considerations may apply to GAGAS engagements

³⁹See para. 2.13 and the AICPA *Codification of Statements on Auditing Standards* (AU-C) for additional discussion of the relationship between GAGAS and other professional standards.

⁴⁰See para. 2.14 for a discussion of the AICPA Code of Professional Conduct.

⁴¹See AU-C section 320, *Materiality in Planning and Performing an Audit* (AICPA, *Professional Standards*).

that concern government entities or entities that receive government awards. For example, for engagements conducted in accordance with GAGAS, auditors may find it appropriate to use lower materiality levels than those used in non-GAGAS audits because of the public accountability of government entities and entities receiving government funding, various legal and regulatory requirements, and the visibility and sensitivity of government programs.

Licensing and Certification

Requirements: Licensing and Certification

- **6.04** Auditors engaged to conduct financial audits in the United States who do not work for a government audit organization should be licensed CPAs, persons working for licensed certified public accounting firms, or licensed accountants in states that have multiclass licensing systems that recognize licensed accountants other than CPAs.
- **6.05** Auditors engaged to conduct financial audits of entities operating outside of the United States who do not work for a government audit organization should meet the qualifications indicated in paragraph 6.04, have certifications that meet all applicable national and international standards and serve in their respective countries as the functional equivalent of CPAs in the United States, or work for nongovernment audit organizations that are the functional equivalent of licensed certified public accounting firms in the United States.

Auditor Communication

Requirements: Auditor Communication

- **6.06** If the law or regulation requiring an audit specifically identifies the entities to be audited, auditors should communicate pertinent information that in the auditors' professional judgment needs to be communicated both to individuals contracting for or requesting the audit and to those legislative committees, if any, that have ongoing oversight responsibilities for the audited entity.
- **6.07** If the identity of those charged with governance is not clearly evident, auditors should document the process followed and

conclusions reached in identifying the appropriate individuals to receive the required communications.

Application Guidance: Auditor Communication

- **6.08** One example of a law or regulation requiring an audit that does not specifically identify the entities to be audited is the Single Audit Act Amendments of 1996.
- **6.09** For some matters, early communication to management or those charged with governance may be important because of the relative significance and the urgency for corrective follow-up action. ⁴² Further, early communication is important to allow management to take prompt corrective action to prevent further occurrences when a control deficiency results in identified or suspected noncompliance with provisions of laws, regulations, contracts, and grant agreements or identified or suspected instances of fraud. When a deficiency is communicated early, the reporting requirements and application guidance in paragraphs 6.39 through 6.49 still apply.
- **6.10** Because the governance structures of government entities and organizations can vary widely, it may not always be clearly evident who is charged with key governance functions. The process for identifying those charged with governance includes evaluating the organizational structure for directing and controlling operations to achieve the audited entity's objectives and how the audited entity delegates authority and establishes accountability for management.

Results of Previous Engagements

Requirement: Results of Previous Engagements

6.11 When planning the audit, auditors should ask management of the audited entity to identify previous audits, attestation engagements, and other studies that directly relate to the objectives of the audit, including whether related recommendations have been implemented. Auditors should evaluate whether the audited entity has taken appropriate

⁴²See AU-C section 265, *Communicating Internal Control Related Matters Identified in an Audit* (AICPA, *Professional Standards*).

corrective action to address findings and recommendations from previous engagements that could have a significant effect on the subject matter. Auditors should use this information in assessing risk and determining the nature, timing, and extent of current audit work and determining the extent to which testing the implementation of the corrective actions is applicable to the current audit objectives.

Investigations or Legal Proceedings

Requirement: Investigations or Legal Proceedings

6.12 Auditors should inquire of management of the audited entity whether any investigations or legal proceedings have been initiated or are in process with respect to the period under audit, and should evaluate the effect of initiated or in-process investigations or legal proceedings on the current audit.

Application Guidance: Investigations or Legal Proceedings

- **6.13** Laws, regulations, or policies may require auditors to communicate indications of certain types of fraud or noncompliance with provisions of laws, regulations, contracts, and grant agreements to law enforcement or investigatory authorities before performing additional audit procedures.
- **6.14** Avoiding interference with investigations or legal proceedings is important in pursuing indications of fraud and noncompliance with provisions of laws, regulations, contracts, and grant agreements. In some cases, it may be appropriate for the auditors to work with investigators or legal authorities or to withdraw from or defer further work on the engagement or a portion of the engagement to avoid interfering with an ongoing investigation or legal proceeding.

Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

Requirement: Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

6.15 Auditors should extend the AICPA requirements concerning consideration of noncompliance with laws and regulations to include

consideration of noncompliance with provisions of contracts and grant agreements.⁴³

Application Guidance: Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

6.16 Government programs are subject to provisions of many laws, regulations, contracts, and grant agreements. At the same time, these provisions' significance within the context of the audit objectives varies widely, depending on the objectives of the audit. Auditors may consult with their legal counsel to (1) determine those laws and regulations that are significant to the audit objectives, (2) design tests of compliance with laws and regulations, and (3) evaluate the results of those tests. Auditors also may consult with their legal counsel when audit objectives require testing compliance with provisions of contracts or grant agreements. Depending on the circumstances of the audit, auditors may consult with others, such as investigative staff, other audit organizations or government entities that provided professional services to the audited entity, or applicable law enforcement authorities, to obtain information on compliance matters.

Findings

Requirements: Findings

- **6.17** When auditors identify findings, they should plan and perform procedures to develop the criteria, condition, cause, and effect of the findings to the extent that these elements are relevant and necessary to achieve the audit objectives.
- **6.18** Auditors should consider internal control deficiencies in their evaluation of identified findings when developing the cause element of the identified findings.

⁴³See AU-C section 250, *Consideration of Laws and Regulations in an Audit of Financial Statements* (AICPA, *Professional Standards*).

Application Guidance: Findings

- **6.19** Findings may involve deficiencies in internal control; noncompliance with provisions of laws, regulations, contracts, and grant agreements; or instances of fraud.
- **6.20** Given the concept of accountability for use of public resources and government authority, evaluating internal control in a government environment may also include considering internal control deficiencies that result in waste or abuse. Because the determination of waste and abuse is subjective, auditors are not required to perform specific procedures to detect waste or abuse in financial audits. However, auditors may consider whether and how to communicate such matters if they become aware of them. Auditors may also discover that waste or abuse are indicative of fraud or noncompliance with provisions of laws, regulations, contracts, and grant agreements.
- **6.21** Waste is the act of using or expending resources carelessly, extravagantly, or to no purpose. Importantly, waste can include activities that do not include abuse and does not necessarily involve a violation of law. Rather, waste relates primarily to mismanagement, inappropriate actions, and inadequate oversight.
- **6.22** The following are examples of waste, depending on the facts and circumstances:
 - **a.** Making travel choices that are contrary to existing travel policies or are unnecessarily extravagant or expensive.
 - **b.** Making procurement or vendor selections that are contrary to existing policies or are unnecessarily extravagant or expensive.
- **6.23** Abuse is behavior that is deficient or improper when compared with behavior that a prudent person would consider reasonable and necessary business practice given the facts and circumstances, but excludes fraud and noncompliance with provisions of laws, regulations, contracts, and grant agreements. Abuse also includes misuse of authority or position for personal financial interests or those of an immediate or close family member or business associate.
- **6.24** The following are examples of abuse, depending on the facts and circumstances:

- **a.** Creating unneeded overtime.
- **b.** Requesting staff to perform personal errands or work tasks for a supervisor or manager.
- c. Misusing the official's position for personal gain (including actions that could be perceived by an objective third party with knowledge of the relevant information as improperly benefiting an official's personal financial interests or those of an immediate or close family member; a general partner; an organization for which the official serves as an officer, director, trustee, or employee; or an organization with which the official is negotiating concerning future employment).
- **6.25** Criteria: For inclusion in findings, criteria may include the laws, regulations, contracts, grant agreements, standards, measures, expected performance, defined business practices, and benchmarks against which performance is compared or evaluated. Criteria identify the required or desired state or expectation with respect to the program or operation. Criteria provide a context for evaluating evidence and understanding the findings, conclusions, and recommendations in the report. In a financial audit, the applicable financial reporting framework, such as generally accepted accounting principles, represents one set of criteria.
- **6.26** Condition: Condition is a situation that exists. The condition is determined and documented during the audit.
- **6.27** Cause: The cause is the factor or factors responsible for the difference between the condition and the criteria, and may also serve as a basis for recommendations for corrective actions. Common factors include poorly designed policies, procedures, or criteria; inconsistent, incomplete, or incorrect implementation; or factors beyond the control of program management. Auditors may assess whether the evidence provides a reasonable and convincing argument for why the stated cause is the key factor contributing to the difference between the condition and the criteria.
- **6.28** Effect or potential effect: The effect or potential effect is the outcome or consequence resulting from the difference between the condition and the criteria. When the audit objectives include identifying the actual or potential consequences of a condition that varies (either positively or negatively) from the criteria identified in the audit, effect is a measure of those consequences. Effect or potential effect may be used to

demonstrate the need for corrective action in response to identified problems or relevant risks.

- **6.29** Regardless of the type of finding identified, the cause of a finding may relate to one or more underlying internal control deficiencies. Depending on the magnitude of impact, likelihood of occurrence, and nature of the deficiency, the deficiency could be a significant deficiency or material weakness in a financial audit.⁴⁴
- **6.30** Considering internal control in the context of a comprehensive internal control framework, such as *Standards for Internal Control in the Federal Government* or *Internal Control—Integrated Framework*, ⁴⁵ can help auditors to determine whether underlying internal control deficiencies exist as the root cause of findings. Identifying these deficiencies can help provide the basis for developing meaningful recommendations for corrective actions.

Audit Documentation

Requirements: Audit Documentation

- **6.31** Auditors should document supervisory review, before the report release date, of the evidence that supports the findings and conclusions contained in the audit report.
- **6.32** Auditors should document any departures from the GAGAS requirements and the effect on the audit and on the auditors' conclusions when the audit is not in compliance with applicable GAGAS requirements because of law, regulation, scope limitations, restrictions on access to records, or other issues affecting the audit.

⁴⁴See AU-C section 265, Communicating Internal Control Related Matters Identified in an Audit (AICPA, Professional Standards).

⁴⁵Para. .A16 of AU-C section 940, *An Audit of Internal Control Over Financial Reporting That Is Integrated With an Audit of Financial Statements* (AICPA, *Professional* Standards) indicates that the Committee of Sponsoring Organizations of the Treadway Commission's *Internal Control—Integrated Framework* and *Standards for Internal Control in the Federal Government* (GAO-14-704G) provide suitable and available criteria against which management may evaluate and report on the effectiveness of the entity's internal control over financial reporting. *Standards for Internal Control in the Federal Government* may be adopted by entities beyond those federal entities for which it is legally required, such as state, local, and quasi-governmental entities, as well as other federal entities and not-for-profit organizations, as a framework for an internal control system.

Application Guidance: Audit Documentation

6.33 When documenting departures from the GAGAS requirements, the audit documentation requirements apply to departures from unconditional requirements and from presumptively mandatory requirements when alternative procedures performed in the circumstances were not sufficient to achieve the objectives of the requirements.

Availability of Individuals and Documentation

Requirement: Availability of Individuals and Documentation

6.34 Subject to applicable provisions of laws and regulations, auditors should make appropriate individuals and audit documentation available upon request and in a timely manner to other auditors or reviewers.

Application Guidance: Availability of Individuals and Documentation

6.35 Underlying GAGAS audits is the premise that audit organizations in federal, state, and local governments and public accounting firms engaged to conduct financial audits in accordance with GAGAS cooperate in auditing programs of common interest so that auditors may use others' work and avoid duplication of efforts. The use of auditors' work by other auditors may be facilitated by contractual arrangements for GAGAS audits that provide for full and timely access to appropriate individuals and to audit documentation.

Additional GAGAS Requirements for Reporting on Financial Audits

Reporting the Auditors' Compliance with GAGAS

Requirement: Reporting the Auditors' Compliance with GAGAS

6.36 When auditors comply with all applicable GAGAS requirements, they should include a statement in the audit report that they conducted the audit in accordance with GAGAS.⁴⁶

Application Guidance: Reporting the Auditors' Compliance with GAGAS

- **6.37** Because GAGAS incorporates by reference the AICPA's financial audit standards, GAGAS does not require auditors to cite compliance with the AICPA standards when citing compliance with GAGAS. GAGAS does not prohibit auditors from issuing a separate report conforming only to the requirements of the AICPA or other standards.⁴⁷
- **6.38** When disclaiming an opinion on a financial audit, auditors may revise the statement that the auditor was engaged to audit the financial statements. For example, auditors may state that they were engaged to conduct the audit in accordance with GAGAS or that the auditors' work was conducted in accordance with GAGAS, depending on whether the use of GAGAS is required or voluntary. Determining how to revise this statement is a matter of professional judgment.

⁴⁶See paras. 2.16 through 2.19 for information on the GAGAS compliance statement.

⁴⁷See AU-C section 700, Forming an Opinion and Reporting on Financial Statements (AICPA, Professional Standards).

⁴⁸See AU-C section 705, *Modifications to the Opinion in the Independent Auditor's Report* (AICPA, *Professional Standards*).

Reporting on Internal Control; Compliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements; and Instances of Fraud

Requirements: Reporting on Internal Control; Compliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements; and Instances of Fraud

- **6.39** Auditors should report on internal control and compliance with provisions of laws, regulations, contracts, or grant agreements regardless of whether they identify internal control deficiencies or instances of noncompliance.
- **6.40** When providing an opinion or a disclaimer on financial statements, auditors should report as findings any significant deficiencies or material weaknesses in internal control over financial reporting that the auditors identified based on the engagement work performed.
- **6.41** Auditors should include in their report on internal control or compliance the relevant information about noncompliance and fraud when auditors, based on sufficient, appropriate evidence, identify or suspect
 - a. noncompliance with provisions of laws, regulations, contracts, or grant agreements that has a material effect on the financial statements or other financial data significant to the audit objectives or
 - **b.** fraud that is material, either quantitatively or qualitatively, to the financial statements or other financial data significant to the audit objectives.
- **6.42** Auditors should include either in the same or in separate report(s) a description of the scope of the auditors' testing of internal control over financial reporting and of compliance with provisions of laws, regulations, contracts, and grant agreements. Auditors should also state in the report(s) whether the tests they performed provided sufficient, appropriate evidence to support opinions on the effectiveness of internal control and on compliance with provisions of laws, regulations, contracts, and grant agreements.
- **6.43** If auditors report separately (including separate reports bound in the same document) on internal control over financial reporting and on compliance with provisions of laws, regulations, contracts, and grant

agreements, they should include a reference in the audit report on the financial statements to those additional reports. They should also state in the audit report that the reports on internal control over financial reporting and on compliance with provisions of laws, regulations, contracts, and grant agreements are an integral part of a GAGAS audit in considering the audited entity's internal control over financial reporting and compliance. If separate reports are used, the auditors should make the report on internal control and compliance available to users in the same manner as the financial audit report to which it relates.

6.44 Auditors should communicate in writing to audited entity officials when

- a. identified or suspected noncompliance with provisions of laws, regulations, contracts, or grant agreements comes to the auditor's attention during the course of an audit that has an effect on the financial statements or other financial data significant to the audit objectives that is less than material but warrants the attention of those charged with governance or
- b. the auditor has obtained evidence of identified or suspected instances of fraud that have an effect on the financial statements or other financial data significant to the audit objectives that are less than material but warrant the attention of those charged with governance.

Application Guidance: Reporting on Internal Control; Compliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements; and Instances of Fraud

6.45 The GAGAS requirement to report on internal control over financial reporting is based on the AICPA requirements to communicate in writing to those charged with governance significant deficiencies and material weaknesses in internal control over financial reporting identified during an audit. The objective of the GAGAS internal control reporting requirement for financial audits is to increase the availability of information on significant deficiencies and material weaknesses to users of financial statements other than those charged with governance.

6.46 Internal control plays an expanded role in the government sector. Given the government's accountability for public resources, assessing

internal control in a government environment may involve considering controls that would not be required in the private sector. In the government sector, evaluating controls that are relevant to the audit involves understanding significant controls that the audited entity designed, implemented, and operated as part of its responsibility for oversight of public resources.

- **6.47** The audit report on internal control and compliance with provisions of laws, regulations, contracts, and grant agreements relates only to the most recent reporting period included, when comparative financial statements are presented.
- **6.48** When identified or suspected noncompliance with provisions of laws, regulations, contracts, or grant agreements that does not warrant the attention of those charged with governance comes to the auditor's attention during the course of the audit, the auditors' determination of how to communicate such instances to audited entity officials is a matter of professional judgment. When identified or suspected noncompliance with provisions of laws, regulations, contracts, or grant agreements is clearly inconsequential, the auditors' determination of whether and how to communicate such instances to audited entity officials is a matter of professional judgment.
- **6.49** When auditors identify or suspect noncompliance with provisions of laws, regulations, contracts, or grant agreements or instances of fraud, auditors may consult with authorities or legal counsel about whether publicly reporting such information would compromise investigative or legal proceedings. Auditors may limit their public reporting to matters that would not compromise those proceedings and, for example, report only on information that is already a part of the public record.

Presenting Findings in the Audit Report

Requirements: Presenting Findings in the Audit Report

- **6.50** When presenting findings, auditors should develop the elements of the findings to the extent necessary to assist management or oversight officials of the audited entity in understanding the need for corrective action.
- **6.51** Auditors should place their findings in perspective by describing the nature and extent of the issues being reported and the extent of

the work performed that resulted in the finding. To give the reader a basis for judging the prevalence and consequences of these findings, auditors should, as appropriate, relate the instances identified to the population or the number of cases examined and quantify the results in terms of dollar value or other measures. If the results cannot be projected, auditors should limit their conclusions appropriately.

Application Guidance: Presenting Findings in the Audit Report

6.52 Along with assisting management or oversight officials of the audited entity in understanding the need for corrective action, clearly developed findings assist auditors in making recommendations for corrective action. If auditors sufficiently develop the elements of a finding, they may provide recommendations for corrective action.

Reporting Findings Directly to Parties outside the Audited Entity

Requirements: Reporting Findings Directly to Parties outside the Audited Entity

- **6.53** Auditors should report identified or suspected noncompliance with provisions of laws, regulations, contracts, and grant agreements and instances of fraud directly to parties outside the audited entity in the following two circumstances.
 - a. When audited entity management fails to satisfy legal or regulatory requirements to report such information to external parties specified in law or regulation, auditors should first communicate the failure to report such information to those charged with governance. If the audited entity still does not report this information to the specified external parties as soon as practicable after the auditors' communication with those charged with governance, then the auditors should report the information directly to the specified external parties.
 - b. When audited entity management fails to take timely and appropriate steps to respond to fraud or noncompliance with provisions of laws, regulations, contracts, and grant agreements that (1) is likely to have a material effect on the subject matter and (2) involves funding received directly or indirectly from a government agency, auditors should first

report management's failure to take timely and appropriate steps to those charged with governance. If the audited entity still does not take timely and appropriate steps as soon as practicable after the auditors' communication with those charged with governance, then the auditors should report the audited entity's failure to take timely and appropriate steps directly to the funding agency.

- **6.54** Auditors should comply with the requirements in paragraph 6.53 even if they have resigned or been dismissed from the audit prior to its completion.
- **6.55** Auditors should obtain sufficient, appropriate evidence, such as confirmation from outside parties, to corroborate representations by management of the audited entity that it has reported audit findings in accordance with provisions of laws, regulations, or funding agreements. When auditors are unable to do so, they should report such information directly as discussed in paragraphs 6.53 and 6.54.

Application Guidance: Reporting Findings Directly to Parties outside the Audited Entity

6.56 The reporting in paragraph 6.53 is in addition to any legal requirements to report such information directly to parties outside the audited entity.

Obtaining and Reporting the Views of Responsible Officials

Requirements: Obtaining and Reporting the Views of Responsible Officials

- **6.57** Auditors should obtain and report the views of responsible officials of the audited entity concerning the findings, conclusions, and recommendations in the audit report, as well as any planned corrective actions.
- **6.58** When auditors receive written comments from the responsible officials, they should include in their report a copy of the officials' written comments or a summary of the comments received. When the responsible officials provide oral comments only, auditors should prepare a summary of the oral comments, provide a copy of the

summary to the responsible officials to verify that the comments are accurately represented, and include the summary in their report.

- **6.59** When the audited entity's comments are inconsistent or in conflict with the findings, conclusions, or recommendations in the draft report, the auditors should evaluate the validity of the audited entity's comments. If the auditors disagree with the comments, they should explain in the report their reasons for disagreement. Conversely, the auditors should modify their report as necessary if they find the comments valid and supported by sufficient, appropriate evidence.
- **6.60** If the audited entity refuses to provide comments or is unable to provide comments within a reasonable period of time, the auditors should issue the report without receiving comments from the audited entity. In such cases, the auditors should indicate in the report that the audited entity did not provide comments.

Application Guidance: Obtaining and Reporting the Views of Responsible Officials

- **6.61** Providing a draft report with findings for review and comment by responsible officials of the audited entity and others helps the auditors develop a report that is fair, complete, and objective. Including the views of responsible officials results in a report that presents not only the auditors' findings, conclusions, and recommendations but also the perspectives of the audited entity's responsible officials and the corrective actions they plan to take. Obtaining the comments in writing is preferred, but oral comments are acceptable. In cases in which the audited entity provides technical comments in addition to its written or oral comments on the report, auditors may disclose in the report that such comments were received. Technical comments address points of fact or are editorial in nature and do not address substantive issues, such as methodology, findings, conclusions, or recommendations.
- **6.62** Obtaining oral comments may be appropriate when, for example, there is a reporting date critical to meeting a user's needs; auditors have worked closely with the responsible officials throughout the engagement, and the parties are familiar with the findings and issues addressed in the draft report; or the auditors do not expect major disagreements with findings, conclusions, or recommendations in the draft report or major controversies with regard to the issues discussed in the draft report.

Reporting Confidential or Sensitive Information

Requirements: Reporting Confidential or Sensitive Information

- **6.63** If certain information is prohibited from public disclosure or is excluded from a report because of its confidential or sensitive nature, auditors should disclose in the report that certain information has been omitted and the circumstances that make the omission necessary.
- **6.64** When circumstances call for omission of certain information from the report, auditors should evaluate whether this omission could distort the audit results or conceal improper or illegal practices and revise the report language as necessary to avoid report users drawing inappropriate conclusions from the information presented.
- **6.65** When the audit organization is subject to public records laws, auditors should determine whether public records laws could affect the availability of classified or limited use reports and determine whether other means of communicating with management and those charged with governance would be more appropriate. Auditors use professional judgment to determine the appropriate means to communicate the omitted information to management and those charged with governance considering, among other things, whether public records laws could affect the availability of classified or limited use reports.

Application Guidance: Reporting Confidential or Sensitive Information

- **6.66** If the report refers to the omitted information, the reference may be general and not specific. If the omitted information is not necessary to meet the audit objectives, the report need not refer to its omission.
- **6.67** Certain information may be classified or may otherwise be prohibited from general disclosure by federal, state, or local laws or regulations. In such circumstances, auditors may issue a separate, classified, or limited use report containing such information and distribute the report only to persons authorized by law or regulation to receive it.
- **6.68** Additional circumstances associated with public safety, privacy, or security concerns could also justify the exclusion of certain information from a publicly available or widely distributed report. For example, detailed information related to computer security for a particular program may be excluded from publicly available reports because of the potential damage that misuse of this information could cause. In such

circumstances, auditors may issue a limited use report containing such information and distribute the report only to those parties responsible for acting on the auditors' recommendations. In some instances, it may be appropriate to issue both a publicly available report with the sensitive information excluded and a limited use report. The auditors may consult with legal counsel regarding any requirements or other circumstances that may necessitate omitting certain information. Considering the broad public interest in the program or activity under audit assists auditors when deciding whether to exclude certain information from publicly available reports.

6.69 In cases described in paragraph 6.65, the auditors may communicate general information in a written report and communicate detailed information orally. The auditors may consult with legal counsel regarding applicable public records laws.

Distributing Reports

Requirement: Distributing Reports

- **6.70** Distribution of reports completed in accordance with GAGAS depends on the auditors' relationship with the audited entity and the nature of the information contained in the reports. Auditors should document any limitation on report distribution.
 - a. An audit organization in a government entity should distribute audit reports to those charged with governance, to the appropriate audited entity officials, and to the appropriate oversight bodies or organizations requiring or arranging for the audits. As appropriate, auditors should also distribute copies of the reports to other officials who have legal oversight authority or who may be responsible for acting on audit findings and recommendations and to others authorized to receive such reports.
 - b. A public accounting firm contracted to conduct an audit in accordance with GAGAS should clarify report distribution responsibilities with the engaging party. If the contracting firm is responsible for the distribution, it should reach agreement with the party contracting for the audit about which officials or organizations will receive the report and the steps being taken to make the report available to the public.

Chapter 7: Standards for Attestation Engagements and Reviews of Financial Statements

7.01 This chapter contains requirements and guidance for conducting and reporting on attestation engagements and reviews of financial statements conducted in accordance with generally accepted government auditing standards (GAGAS). For attestation engagements, GAGAS incorporates by reference the American Institute of Certified Public Accountants' (AICPA) Statements on Standards for Attestation Engagements (SSAE). For reviews of financial statements, GAGAS incorporates by reference AICPA's AR-C section 90, Review of Financial Statements. 49 All sections of the cited standards are incorporated, including the introduction, objectives, definitions, requirements, and application and other explanatory material. GAGAS does not incorporate the AICPA Code of Professional Conduct by reference but recognizes that certain certified public accountants (CPA) may use or may be required to use the code in conjunction with GAGAS. 50 For attestation engagements and reviews of financial statements conducted in accordance with GAGAS, the requirements and guidance in the respective incorporated standards and this chapter apply. The requirements and guidance contained in chapters 1 through 5 also apply.

7.02 An attestation engagement can provide one of three levels of service as defined by the AICPA: an examination engagement, a review engagement, or an agreed-upon procedures engagement.

7.03 The AICPA standards used in conjunction with GAGAS require auditors to establish an understanding with the audited entity regarding the services to be performed for each attestation engagement or review of financial statements. Such an understanding reduces the risk that either the auditors or the audited entity may misinterpret the needs or expectations of the other party. The understanding includes the objectives of the engagement, responsibilities of auditors, and limitations of the engagement.⁵¹

7.04 Auditors often conduct GAGAS engagements under a contract with a party other than the officials of the audited entity or pursuant to a third-party request. In such cases, auditors may also find it appropriate to communicate information regarding the services to be performed to the

⁴⁹AICPA, *Professional Standards*.

⁵⁰See para. 2.14 for a discussion of the AICPA Code of Professional Conduct.

⁵¹See para. .08 of AT-C section 205, para. .09 of AT-C section 210, and para. .14 of AT-C section 215; and para. .11 of AR-C section 90 (AICPA, *Professional Standards*).

individuals contracting for or requesting the engagement. Such an understanding can help auditors avoid any misunderstandings regarding the nature of the review or agreed-upon procedures engagement. For example, a review engagement only provides limited assurance, and as a result, auditors do not perform sufficient work to be able to develop elements of a finding or provide recommendations that are common in other types of GAGAS engagements. An agreed-upon procedures engagement does not provide an opinion or conclusion, and as a result, auditors do not perform sufficient work to be able to develop elements of a finding or provide recommendations that are common in other types of GAGAS engagements. Consequently, requesting parties may find that a different type of attestation engagement or a performance audit may provide the appropriate level of assurance to meet their needs.

Examination Engagements

Compliance with Standards

Requirement: Compliance with Standards

7.05 GAGAS establishes requirements for examination engagements in addition to the requirements for examinations contained in the AICPA's SSAEs. Auditors should comply with these additional requirements, along with the AICPA requirements for examination engagements, when citing GAGAS in their examination engagement reports.

Application Guidance: Compliance with Standards

7.06 The AICPA standards applicable to examinations require the auditors to apply the concept of materiality appropriately in planning and performing the examination. Additional considerations may apply to GAGAS engagements that concern government entities or entities that receive government awards. For example, for engagements conducted in accordance with GAGAS, auditors may find it appropriate to use lower materiality levels than those used in non-GAGAS engagements because of the public accountability of government entities and entities receiving government funding, various legal and regulatory requirements, and the visibility and sensitivity of government programs.

Licensing and Certification

Requirements: Licensing and Certification

7.07 Auditors engaged to conduct examination engagements in the United States who do not work for a government audit organization should be licensed CPAs, persons working for licensed certified public accounting firms, or licensed accountants in states that have multiclass licensing systems that recognize licensed accountants other than CPAs.

7.08 Auditors engaged to conduct examination engagements of entities operating outside of the United States who do not work for a government audit organization should meet the qualifications indicated in paragraph 7.07, have certifications that meet all applicable national and international standards and serve in their respective countries as the functional equivalent of CPAs in the United States, or work for nongovernment audit organizations that are the functional equivalent of licensed certified public accounting firms in the United States.

Auditor Communication

Requirements: Auditor Communication

7.09 If the law or regulation requiring an examination engagement specifically identifies the entities to be examined, auditors should communicate pertinent information that in the auditors' professional judgment needs to be communicated both to individuals contracting for or requesting the examination and to those legislative committees, if any, that have ongoing oversight responsibilities for the audited entity.

7.10 If the identity of those charged with governance is not clearly evident, auditors should document the process followed and conclusions reached in identifying the appropriate individuals to receive the required communications.

Application Guidance: Auditor Communication

7.11 For some matters, early communication to those charged with governance or management may be important because of the relative significance and the urgency for corrective follow-up action. Further, early communication is important to allow management to take prompt

corrective action to prevent further occurrences when a control deficiency results in identified or suspected noncompliance with provisions of laws, regulations, contracts, and grant agreements or identified or suspected fraud. When a deficiency is communicated early, the reporting requirements and application guidance in paragraphs 7.39 through 7.47 still apply.

7.12 Because the governance structures of government entities and organizations can vary widely, it may not always be clearly evident who is charged with key governance functions. The process for identifying those charged with governance includes evaluating the organizational structure for directing and controlling operations to achieve the audited entity's objectives and how the audited entity delegates authority and establishes accountability for management.

Results of Previous Engagements

Requirement: Results of Previous Engagements

7.13 When planning a GAGAS examination engagement, auditors should ask management of the audited entity to identify previous audits, attestation engagements, and other studies that directly relate to the subject matter or an assertion about the subject matter of the examination engagement, including whether related recommendations have been implemented. Auditors should evaluate whether the audited entity has taken appropriate corrective action to address findings and recommendations from previous engagements that could have a significant effect on the subject matter or an assertion about the subject matter. Auditors should use this information in assessing risk and determining the nature, timing, and extent of current work and determining the extent to which testing the implementation of the corrective actions is applicable to the current examination engagement objectives.

Investigations or Legal Proceedings

Requirement: Investigations or Legal Proceedings

7.14 Auditors should inquire of management of the audited entity whether any investigations or legal proceedings significant to the engagement objectives have been initiated or are in process with

respect to the period under examination, and should evaluate the effect of initiated or in-process investigations or legal proceedings on the current examination engagement.

Application Guidance: Investigations or Legal Proceedings

- **7.15** Laws, regulations, or policies may require auditors to report indications of certain types of fraud or noncompliance with provisions of laws, regulations, contracts, and grant agreements to law enforcement or investigatory authorities before performing additional examination procedures.
- **7.16** Avoiding interference with investigations or legal proceedings is important in pursuing indications of fraud and noncompliance with provisions of laws, regulations, contracts, and grant agreements. In some cases, it may be appropriate for the auditors to work with investigators or legal authorities or to withdraw from or defer further work on the attestation engagement or a portion of the engagement to avoid interfering with an ongoing investigation or legal proceeding.

Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

Requirement: Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

7.17 Auditors should extend the AICPA requirements concerning consideration of noncompliance with laws and regulations to include consideration of noncompliance with provisions of contracts and grant agreements.⁵²

Application Guidance: Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

7.18 Government programs are subject to provisions of many laws, regulations, contracts, and grant agreements. At the same time, these provisions' significance within the context of the engagement objectives varies widely, depending on the objectives of the engagement. Auditors may consult with their legal counsel to (1) determine those laws and

⁵²See paras. .32 and .33 of AT-C section 205 (AICPA, *Professional Standards*).

regulations that are significant to the examination objectives, (2) design tests of compliance with laws and regulations, and (3) evaluate the results of those tests. Auditors also may consult with their legal counsel when engagement objectives require testing compliance with provisions of contracts or grant agreements. Depending on the circumstances of the engagement, auditors may consult with others—such as investigative staff, other audit organizations or government entities that provided professional services to the audited entity, or applicable law enforcement authorities—to obtain information on compliance matters.

Findings

Requirements: Findings

- **7.19** When auditors identify findings, they should plan and perform procedures to develop the criteria, condition, cause, and effect of the findings to the extent that these elements are relevant and necessary to achieve the examination objectives.
- **7.20** Auditors should consider internal control deficiencies in their evaluation of identified findings when developing the cause element of the identified findings.

Application Guidance: Findings

- **7.21** Findings may involve deficiencies in internal control; noncompliance with provisions of laws, regulations, contracts, and grant agreements; or instances of fraud.
- **7.22** Given the concept of accountability for use of public resources and government authority, evaluating internal control in a government environment may also include considering internal control deficiencies that result in waste or abuse. Because the determination of waste and abuse is subjective, auditors are not required to perform specific procedures to detect waste or abuse in examinations. However, auditors may consider whether and how to communicate such matters if they become aware of them. Auditors may also discover that waste or abuse are indicative of fraud or noncompliance with provisions of laws, regulations, contracts, and grant agreements.
- **7.23** Waste is the act of using or expending resources carelessly, extravagantly, or to no purpose. Importantly, waste can include activities that do not include abuse and does not necessarily involve a violation of

law. Rather, waste relates primarily to mismanagement, inappropriate actions, and inadequate oversight.

- **7.24** The following are examples of waste, depending on the facts and circumstances:
 - **a.** Making travel choices that are contrary to existing travel policies or are unnecessarily extravagant or expensive.
 - **b.** Making procurement or vendor selections that are contrary to existing policies or are unnecessarily extravagant or expensive.
- **7.25** Abuse is behavior that is deficient or improper when compared with behavior that a prudent person would consider reasonable and necessary business practice given the facts and circumstances, but excludes fraud and noncompliance with provisions of laws, regulations, contracts, and grant agreements. Abuse also includes misuse of authority or position for personal financial interests or those of an immediate or close family member or business associate.
- **7.26** The following are examples of abuse, depending on the facts and circumstances:
 - **a.** Creating unneeded overtime.
 - **b.** Requesting staff to perform personal errands or work tasks for a supervisor or manager.
 - c. Misusing the official's position for personal gain (including actions that could be perceived by an objective third party with knowledge of the relevant information as improperly benefiting an official's personal financial interests or those of an immediate or close family member; a general partner; an organization for which the official serves as an officer, director, trustee, or employee; or an organization with which the official is negotiating concerning future employment).
- **7.27** Criteria: For inclusion in findings, criteria may include the laws, regulations, contracts, grant agreements, standards, measures, expected performance, defined business practices, and benchmarks against which performance is compared or evaluated. Criteria identify the required or desired state or expectation with respect to the program or operation.

Criteria provide a context for evaluating evidence and understanding the findings, conclusions, and recommendations in the report.

- **7.28** Condition: Condition is a situation that exists. The condition is determined and documented during the attestation engagement.
- **7.29** Cause: The cause is the factor or factors responsible for the difference between the condition and the criteria, and may also serve as a basis for recommendations for corrective actions. Common factors include poorly designed policies, procedures, or criteria; inconsistent, incomplete, or incorrect implementation; or factors beyond the control of program management. Auditors may assess whether the evidence provides a reasonable and convincing argument for why the stated cause is the key factor contributing to the difference between the condition and the criteria.
- **7.30** Effect or potential effect: The effect or potential effect is the outcome or consequence resulting from the difference between the condition and the criteria. When the engagement objectives include identifying the actual or potential consequences of a condition that varies (either positively or negatively) from the criteria identified in the engagement, effect is a measure of those consequences. Effect or potential effect may be used to demonstrate the need for corrective action in response to identified problems or relevant risks.
- **7.31** Regardless of the type of finding identified, the cause of a finding may relate to an underlying internal control deficiency. Depending on the magnitude of impact, likelihood of occurrence, and nature of the deficiency, this deficiency could be a significant deficiency or a material weakness.
- **7.32** Considering internal control in the context of a comprehensive internal control framework, such as *Standards for Internal Control in the Federal Government* or *Internal Control—Integrated Framework*, ⁵³ can

⁵³The Committee of Sponsoring Organizations of the Treadway Commission's *Internal Control—Integrated Framework* and *Standards for Internal Control in the Federal Government* (GAO-14-704G) provide suitable and available criteria against which management may evaluate and report on the effectiveness of the entity's internal control. *Standards for Internal Control in the Federal Government* may be adopted by entities beyond those federal entities for which it is legally required, such as state, local, and quasi-governmental entities, as well as other federal entities and not-for-profit organizations, as a framework for an internal control system.

help auditors to determine whether underlying internal control deficiencies exist as the root cause of findings. Identifying these deficiencies can help provide the basis for developing meaningful recommendations for corrective actions.

Examination Engagement Documentation

Requirements: Examination Engagement Documentation

- **7.33** Auditors should comply with the following documentation requirements.
 - a. Before the date of the examination report, document supervisory review of the evidence that supports the findings, conclusions, and recommendations contained in the examination report.
 - b. Document any departures from the GAGAS requirements and the effect on the examination engagement and on the auditors' conclusions when the examination engagement does not comply with applicable GAGAS requirements because of law, regulation, scope limitations, restrictions on access to records, or other issues affecting the examination engagement.
- **7.34** In addition to the requirements of the examination engagement standards used in conjunction with GAGAS, auditors should prepare attest documentation in sufficient detail to enable an experienced auditor, having no previous connection to the examination engagement, to understand from the documentation the nature, timing, extent, and results of procedures performed and the evidence obtained and its source and the conclusions reached, including evidence that supports the auditors' significant judgments and conclusions.

Application Guidance: Examination Engagement Documentation

- **7.35** When documenting departures from the GAGAS requirements where alternative procedures performed were not sufficient to achieve the objectives of the requirements, the examination engagement documentation requirements apply to departures from unconditional requirements and presumptively mandatory requirements.
- **7.36** An experienced auditor is an individual who possesses the competencies and skills to be able to conduct the examination

engagement. These competencies and skills include an understanding of (1) examination engagement processes and related examination standards, (2) GAGAS and applicable legal and regulatory requirements, (3) the subject matter on which the auditors are engaged to report, (4) the suitability and availability of criteria, and (5) issues related to the audited entity's environment.

Availability of Individuals and Documentation

Requirement: Availability of Individuals and Documentation

7.37 Subject to applicable provisions of laws and regulations, auditors should make appropriate individuals and examination engagement documentation available upon request and in a timely manner to other auditors or reviewers.

Application Guidance: Availability of Individuals and Documentation

7.38 Underlying GAGAS examination engagements is the premise that audit organizations in federal, state, and local governments and public accounting firms engaged to conduct examination engagements in accordance with GAGAS cooperate in evaluating programs of common interest so that auditors may use others' work and avoid duplication of efforts. The use of auditors' work by other auditors may be facilitated by contractual arrangements for GAGAS engagements that provide for full and timely access to appropriate individuals and to engagement documentation.

Reporting the Auditors' Compliance with GAGAS

Requirements: Reporting the Auditors' Compliance with GAGAS

- **7.39** When auditors comply with all applicable GAGAS requirements, they should include a statement in the report that they conducted the examination in accordance with GAGAS.⁵⁴
- **7.40** If auditors report separately (including separate reports bound in the same document) on deficiencies in internal control; noncompliance with provisions of laws, regulations, contracts, and grant agreements;

⁵⁴See paras. 2.16 through 2.19 for information on the GAGAS compliance statement.

or instances of fraud, they should state in the examination report that they are issuing those additional reports. They should include a reference to the separate reports and also state that the reports are an integral part of a GAGAS examination engagement.

Application Guidance: Reporting the Auditors' Compliance with GAGAS

7.41 Because GAGAS incorporates by reference the AICPA's attestation standards, GAGAS does not require auditors to cite compliance with the AICPA standards when citing compliance with GAGAS. GAGAS does not prohibit auditors from issuing a separate report conforming only to the requirements of the AICPA or other standards.

Reporting Deficiencies in Internal Control

Requirement: Reporting Deficiencies in Internal Control

7.42 Auditors should include in the examination report all internal control deficiencies, even those communicated early, that are considered to be significant deficiencies or material weaknesses that the auditors identified based on the engagement work performed.⁵⁵

Application Guidance: Reporting Deficiencies in Internal Control

7.43 Determining whether and how to communicate to officials of the audited entity internal control deficiencies that are not considered significant deficiencies or material weaknesses is a matter of professional judgment.

⁵⁵GAGAS's use of internal control terminology is consistent with the definitions contained in AU-C section 265 (AICPA, *Professional Standards*).

Reporting on
Noncompliance with
Provisions of Laws,
Regulations, Contracts,
and Grant Agreements or
Instances of Fraud

Requirements: Reporting on Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements or Instances of Fraud

- **7.44** Auditors should include in their examination report the relevant information about noncompliance and fraud when auditors, based on sufficient, appropriate evidence, identify or suspect
 - a. noncompliance with provisions of laws, regulations, contracts, or grant agreements that has a material effect on the subject matter or an assertion about the subject matter or
 - **b.** fraud that is material, either quantitatively or qualitatively, to the subject matter or an assertion about the subject matter that is significant to the engagement objectives.
- **7.45** When auditors identify or suspect noncompliance with provisions of laws, regulations, contracts, or grant agreements or instances of fraud that have an effect on the subject matter or an assertion about the subject matter that are less than material but warrant the attention of those charged with governance, they should communicate in writing to audited entity officials.

Application Guidance: Reporting on Noncompliance with Provisions of Laws, Regulations, Contracts, or Grant Agreements or Instances of Fraud

- **7.46** When auditors identify or suspect noncompliance with provisions of laws, regulations, contracts, or grant agreements or instances of fraud that do not warrant the attention of those charged with governance, the auditors' determination of whether and how to communicate such instances to audited entity officials is a matter of professional judgment.
- **7.47** When auditors identify or suspect noncompliance with provisions of laws, regulations, contracts, or grant agreements or instances of fraud, auditors may consult with authorities or legal counsel about whether publicly reporting such information would compromise investigative or legal proceedings. Auditors may limit their public reporting to matters that would not compromise those proceedings and, for example, report only on information that is already a part of the public record.

Presenting Findings in the Report

Requirements: Presenting Findings in the Report

- **7.48** When presenting findings, auditors should develop the elements of the findings to the extent necessary to assist management or oversight officials of the audited entity in understanding the need for taking corrective action.
- **7.49** Auditors should place their findings in perspective by describing the nature and extent of the issues being reported and the extent of the work performed that resulted in the findings. To give the reader a basis for judging the prevalence and consequences of the findings, auditors should, as appropriate, relate the instances identified to the population or the number of cases examined and quantify the results in terms of dollar value or other measures. If the results cannot be projected, auditors should limit their conclusions appropriately.

Application Guidance: Presenting Findings in the Report

7.50 Along with assisting management or oversight officials of the audited entity in understanding the need for taking corrective action, clearly developed findings assist auditors in making recommendations for corrective action. If auditors sufficiently develop the elements of a finding, they may provide recommendations for corrective action.

Reporting Findings Directly to Parties outside the Audited Entity

Requirements: Reporting Findings Directly to Parties outside the Audited Entity

- **7.51** Auditors should report identified or suspected noncompliance with provisions of laws, regulations, contracts, and grant agreements and instances of fraud directly to parties outside the audited entity in the following two circumstances.
 - a. When audited entity management fails to satisfy legal or regulatory requirements to report such information to external parties specified in law or regulation, auditors should first communicate the failure to report such information to those charged with governance. If the audited entity still does not report this information to the specified external parties as soon as practicable after the auditors' communication with those

- charged with governance, then the auditors should report the information directly to the specified external parties.
- b. When audited entity management fails to take timely and appropriate steps to respond to fraud or noncompliance with provisions of laws, regulations, contracts, and grant agreements that (1) is likely to have a material effect on the subject matter and (2) involves funding received directly or indirectly from a government agency, auditors should first report management's failure to take timely and appropriate steps to those charged with governance. If the audited entity still does not take timely and appropriate steps as soon as practicable after the auditors' communication with those charged with governance, then the auditors should report the audited entity's failure to take timely and appropriate steps directly to the funding agency.
- **7.52** Auditors should comply with the requirements in paragraph 7.51 even if they have resigned or been dismissed from the engagement prior to its completion.
- **7.53** Auditors should obtain sufficient, appropriate evidence, such as confirmation from outside parties, to corroborate representations by management of the audited entity that it has reported engagement findings in accordance with laws, regulations, or funding agreements. When auditors are unable to do so, they should report such information directly, as discussed in paragraphs 7.51 and 7.52.

Application Guidance: Reporting Findings Directly to Parties outside the Audited Entity

7.54 The reporting in paragraph 7.51 is in addition to any legal requirements to report such information directly to parties outside the audited entity.

Obtaining and Reporting the Views of Responsible Officials

Requirements: Obtaining and Reporting the Views of Responsible Officials

7.55 Auditors should obtain and report the views of responsible

officials of the audited entity concerning the findings, conclusions, and recommendations in the examination report, as well as any planned corrective actions.

- **7.56** When auditors receive written comments from the responsible officials, they should include in their report a copy of the officials' written comments or a summary of the comments received. When the responsible officials provide oral comments only, auditors should prepare a summary of the oral comments, provide a copy of the summary to the responsible officials to verify that the comments are accurately represented, and include the summary in their report.
- **7.57** When the audited entity's comments are inconsistent or in conflict with the findings, conclusions, or recommendations in the draft report, the auditors should evaluate the validity of the audited entity's comments. If the auditors disagree with the comments, they should explain in the report their reasons for disagreement. Conversely, the auditors should modify their report as necessary if they find the comments valid and supported by sufficient, appropriate evidence.
- **7.58** If the audited entity refuses to provide comments or is unable to provide comments within a reasonable period of time, the auditors should issue the report without receiving comments from the audited entity. In such cases, the auditors should indicate in the report that the audited entity did not provide comments.

Application Guidance: Obtaining and Reporting the Views of Responsible Officials

7.59 Providing a draft report with findings for review and comment by responsible officials of the audited entity and others helps the auditors develop a report that is fair, complete, and objective. Including the views of responsible officials results in a report that presents not only the auditors' findings, conclusions, and recommendations but also the perspectives of the audited entity's responsible officials and the corrective actions they plan to take. Obtaining the comments in writing is preferred, but oral comments are acceptable. When the audited entity provides technical comments in addition to its written or oral comments on the report, auditors may disclose in the report that such comments were received. Technical comments address points of fact or are editorial in nature and do not address substantive issues, such as methodology, findings, conclusions, or recommendations.

7.60 Obtaining oral comments may be appropriate when, for example, there is a reporting date critical to meeting a user's needs; auditors have worked closely with the responsible officials throughout the engagement, and the parties are familiar with the findings and issues addressed in the draft report; or the auditors do not expect major disagreements with findings, conclusions, or recommendations in the draft report or major controversies with regard to the issues discussed in the draft report.

Reporting Confidential or Sensitive Information

Requirements: Reporting Confidential or Sensitive Information

- **7.61** If certain information is prohibited from public disclosure or is excluded from a report because of its confidential or sensitive nature, auditors should disclose in the report that certain information has been omitted and the circumstances that make the omission necessary.
- **7.62** When circumstances call for omission of certain information, auditors should evaluate whether the omission could distort the examination engagement results or conceal improper or illegal practices and revise the report language as necessary to avoid report users drawing inappropriate conclusions from the information presented.
- **7.63** When the audit organization is subject to public records laws, auditors should determine whether public records laws could affect the availability of classified or limited use reports and determine whether other means of communicating with management and those charged with governance would be more appropriate. Auditors use professional judgment to determine the appropriate means to communicate the omitted information to management and those charged with governance considering, among other things, whether public records laws could affect the availability of classified or limited use reports.

Application Guidance: Reporting Confidential or Sensitive Information

- **7.64** If the report refers to the omitted information, the reference may be general and not specific. If the omitted information is not necessary to meet the engagement objectives, the report need not refer to its omission.
- **7.65** Certain information may be classified or may otherwise be prohibited from general disclosure by federal, state, or local laws or regulations. In

such circumstances, auditors may issue a separate, classified, or limited use report containing such information and distribute the report only to persons authorized by law or regulation to receive it.

- **7.66** Additional circumstances associated with public safety, privacy, or security concerns could also justify the exclusion of certain information from a publicly available or widely distributed report. For example, detailed information related to computer security for a particular program may be excluded from publicly available reports because of the potential damage that misuse of this information could cause. In such circumstances, auditors may issue a limited use report containing such information and distribute the report only to those parties responsible for acting on the auditors' recommendations. In some instances, it may be appropriate to issue both a publicly available report with the sensitive information excluded and a limited use report. The auditors may consult with legal counsel regarding any requirements or other circumstances that may necessitate omitting certain information.
- **7.67** Considering the broad public interest in the program or activity under examination assists auditors when deciding whether to exclude certain information from publicly available reports.
- **7.68** In cases described in paragraph 7.63, the auditors may communicate general information in a written report and communicate detailed information orally. The auditors may consult with legal counsel regarding applicable public records laws.

Distributing Reports

Requirement: Distributing Reports

- **7.69** Distribution of reports completed in accordance with GAGAS depends on the auditors' relationship with the audited organization and the nature of the information contained in the reports. Auditors should document any limitation on report distribution.
 - a. An audit organization in a government entity should distribute reports to those charged with governance, to the appropriate audited entity officials, and to the appropriate oversight bodies or organizations requiring or arranging for the examination engagements. As appropriate, auditors should also distribute copies of the reports to other officials who have legal oversight

- authority or who may be responsible for acting on engagement findings and recommendations and to others authorized to receive such reports.
- b. A public accounting firm contracted to conduct an examination engagement in accordance with GAGAS should clarify report distribution responsibilities with the engaging party. If the contracting firm is responsible for the distribution, it should reach agreement with the party contracting for the examination engagement about which officials or organizations will receive the report and the steps being taken to make the report available to the public.

Review Engagements

Compliance with Standards

Requirement: Compliance with Standards

7.70 GAGAS establishes requirements for review engagements in addition to the requirements for reviews contained in the AICPA's SSAEs. Auditors should comply with the additional GAGAS requirements, along with the applicable AICPA requirements, when citing GAGAS in their review engagement reports.

Licensing and Certification

Requirements: Licensing and Certification

- **7.71** Auditors engaged to conduct review engagements in the United States who do not work for a government audit organization should be licensed CPAs, persons working for licensed certified public accounting firms, or licensed accountants in states that have multiclass licensing systems that recognize licensed accountants other than CPAs.
- **7.72** Auditors engaged to conduct review engagements of entities operating outside of the United States who do not work for a

government audit organization should meet the qualifications indicated in paragraph 7.71, have certifications that meet all applicable national and international standards and serve in their respective countries as the functional equivalent of CPAs in the United States, or work for nongovernment audit organizations that are the functional equivalent of licensed certified public accounting firms in the United States.

Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

Requirement: Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

7.73 Auditors should extend the AICPA requirements concerning consideration of noncompliance with laws and regulations to include consideration of noncompliance with provisions of contracts and grant agreements.⁵⁶

Reporting Auditors' Compliance with GAGAS

Requirement: Reporting Auditors' Compliance with GAGAS

7.74 When auditors comply with all applicable requirements for a review engagement conducted in accordance with GAGAS, they should include a statement in the review report that they conducted the engagement in accordance with GAGAS.⁵⁷

Application Guidance: Reporting Auditors' Compliance with GAGAS

7.75 Because GAGAS incorporates by reference the AICPA's attestation standards, GAGAS does not require auditors to cite compliance with the AICPA standards when they cite compliance with GAGAS. GAGAS does not prohibit auditors from issuing a separate report conforming only to the requirements of the AICPA or other standards setters.

⁵⁶See paras. .23 and .24 of AT-C section 210 (AICPA, *Professional Standards*).

⁵⁷See paras. 2.16 through 2.19 for information on the GAGAS compliance statement.

7.76 Because review engagements are substantially less in scope than audits and examination engagements, it is important to include all required reporting elements contained in the standards used in conjunction with GAGAS. For example, a required element of the review report under SSAEs is a statement that a review is substantially less in scope than an examination, the objective of which is to express an opinion on the subject matter, and accordingly, no such opinion is expressed. Including only those elements that the reporting standards for review engagements require or permit helps ensure that auditors comply with the standards and that users of GAGAS reports have an understanding of the nature of the work performed and the results of the review engagement.

Distributing Reports

Requirement: Distributing Reports

7.77 Distribution of reports completed in accordance with GAGAS depends on the auditors' relationship with the audited organization and the nature of the information contained in the reports. If the subject matter or the assertion involves material that is classified or contains confidential or sensitive information, auditors should limit report distribution. Auditors should document any limitation on report distribution.

- a. An audit organization in a government entity should distribute reports to those charged with governance, to the appropriate audited entity officials, and to the appropriate oversight bodies or organizations requiring or arranging for the engagements. As appropriate, auditors should also distribute copies of the reports to other officials who have legal oversight authority and to others authorized to receive such reports.
- b. A public accounting firm contracted to conduct a review engagement in accordance with GAGAS should clarify report distribution responsibilities with the engaging party. If the contracting firm is responsible for the distribution, it should reach agreement with the party contracting for the engagement

⁵⁸See para. .46(f)(iii) of AT-C section 210 (AICPA, *Professional Standards*).

> about which officials or organizations will receive the report and the steps being taken to make the report available to the public.

Agreed-Upon Procedures Engagements

Compliance with Standards

Requirement: Compliance with Standards

7.78 GAGAS establishes requirements for agreed-upon procedures engagements in addition to the requirements for agreed-upon procedures engagements contained in the AICPA's SSAEs. Auditors should comply with the additional GAGAS requirements, along with the applicable AICPA requirements, when citing GAGAS in their agreed-upon procedures engagement reports.

Licensing and Certification

Requirements: Licensing and Certification

- **7.79** Auditors engaged to conduct agreed-upon procedures engagements in the United States who do not work for a government audit organization should be licensed CPAs, persons working for licensed certified public accounting firms, or licensed accountants in states that have multiclass licensing systems that recognize licensed accountants other than CPAs.
- **7.80** Auditors engaged to conduct agreed-upon procedures engagements of entities operating outside of the United States who do not work for a government audit organization should meet the qualifications indicated in paragraph 7.79, have certifications that meet all applicable national and international standards and serve in their respective countries as the functional equivalent of CPAs in the United States, or work for nongovernment audit organizations that are the

functional equivalent of licensed certified public accounting firms in the United States.

Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

Requirement: Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

7.81 Auditors should extend the AICPA requirements concerning consideration of noncompliance with laws and regulations to include consideration of noncompliance with provisions of contracts and grant agreements.⁵⁹

Reporting Auditors' Compliance with GAGAS

Requirement: Reporting Auditors' Compliance with GAGAS

7.82 When auditors comply with all applicable GAGAS requirements for agreed-upon procedures engagements, they should include a statement in the agreed-upon procedures engagement report that they conducted the engagement in accordance with GAGAS.⁶⁰

Application Guidance: Reporting Auditors' Compliance with GAGAS

7.83 Because GAGAS incorporates by reference the AICPA's attestation standards, GAGAS does not require auditors to cite compliance with the AICPA standards when citing compliance with GAGAS. GAGAS does not prohibit auditors from issuing a separate report conforming only to the requirements of the AICPA or other standards.

7.84 Because agreed-upon procedures engagements are substantially less in scope than audits and examination engagements, it is important not to deviate from the required reporting elements contained in the attestation standards incorporated by reference in GAGAS, other than

⁵⁹See para. .42 of AT-C section 215 (AICPA, *Professional Standards*).

⁶⁰See paras. 2.16 through 2.19 for information on the GAGAS compliance statement.

including the reference to GAGAS. For example, a required element of the report on agreed-upon procedures is a statement that the auditors were not engaged to and did not conduct an examination or a review of the subject matter, the objective of which would be the expression of an opinion or a conclusion, respectively, and that had the auditors performed additional procedures, other matters may have come to their attention that would have been reported. Another required element is a statement that the sufficiency of the procedures is solely the responsibility of the parties specified in the report and a disclaimer of responsibility for sufficiency of those procedures. Including only those elements that the AICPA reporting standards for agreed-upon procedures engagements require or permit helps ensure that auditors comply with the AICPA standards and that users of GAGAS reports understand the nature of the work performed and the results of the agreed-upon procedures engagement.

Distributing Reports

Requirement: Distributing Reports

7.85 Distribution of reports completed in accordance with GAGAS depends on the auditors' relationship with the audited organization and the nature of the information contained in the reports. If the subject matter or the assertion involves material that is classified or contains confidential or sensitive information, auditors should limit the report distribution. Auditors should document any limitation on report distribution.

- a. An audit organization in a government entity should distribute reports to those charged with governance, to the appropriate audited entity officials, and to the appropriate oversight bodies or organizations requiring or arranging for the engagements. As appropriate, auditors should also distribute copies of the reports to other officials who have legal oversight authority and to others authorized to receive such reports.
- **b.** A public accounting firm contracted to conduct an agreed-upon procedures engagement in accordance with GAGAS should

⁶¹See para. .35(j) of AT-C section 215 (AICPA, *Professional Standards*).

⁶²See para. .35(g) of AT-C section 215 (AICPA, *Professional Standards*).

clarify report distribution responsibilities with the engaging party. If the contracting firm is responsible for the distribution, it should reach agreement with the party contracting for the engagement about which officials or organizations will receive the report and the steps being taken to make the report available to the public.

Reviews of Financial Statements

Compliance with Standards

Requirement: Compliance with Standards

7.86 GAGAS establishes requirements for reviews of financial statements in addition to the requirements for reviews of financial statements contained in the AICPA's AR-C section 90, *Review of Financial Statements*. ⁶³ Auditors should comply with the additional GAGAS requirements, along with the applicable AICPA requirements, when citing GAGAS in their review engagement reports.

Licensing and Certification

Requirements: Licensing and Certification

- **7.87** Auditors engaged to conduct reviews of financial statements in the United States who do not work for a government audit organization should be licensed CPAs, persons working for licensed certified public accounting firms, or licensed accountants in states that have multiclass licensing systems that recognize licensed accountants other than CPAs.
- **7.88** Auditors engaged to conduct reviews of financial statements of entities operating outside of the United States who do not work for a government audit organization should meet the qualifications indicated

⁶³AICPA, *Professional Standards*.

in paragraph 7.87, have certifications that meet all applicable national and international standards and serve in their respective countries as the functional equivalent of CPAs in the United States, or work for nongovernment audit organizations that are the functional equivalent of licensed certified public accounting firms in the United States.

Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

Requirement: Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

7.89 Auditors should extend the AICPA requirements concerning consideration of noncompliance with laws and regulations to include consideration of noncompliance with provisions of contracts and grant agreements.⁶⁴

Reporting Auditors' Compliance with GAGAS

Requirement: Reporting Auditors' Compliance with GAGAS

7.90 When auditors comply with all applicable requirements for a review of financial statements conducted in accordance with GAGAS, they should include a statement in the report that they conducted the engagement in accordance with GAGAS.⁶⁵

Application Guidance: Reporting Auditors' Compliance with GAGAS

7.91 Because GAGAS incorporates by reference the AICPA's AR-C section 90, *Review of Financial Statements*, ⁶⁶ GAGAS does not require auditors to cite compliance with the AICPA standards when they cite compliance with GAGAS. GAGAS does not prohibit auditors from issuing a separate report conforming only to the requirements of the AICPA or other standards setters.

⁶⁴See para. .51 of AR-C section 90 (AICPA, *Professional Standards*).

⁶⁵See paras. 2.16 through 2.19 for information on the GAGAS compliance statement.

⁶⁶AICPA, Professional Standards.

7.92 Because reviews of financial statements are substantially less in scope than audits and examination engagements, it is important to include all required reporting elements contained in the standards used in conjunction with GAGAS. For example, a required reporting element of the review of financial statements under AR-C section 90, *Review of Financial Statements*, ⁶⁷ is to include a statement that a review is substantially less in scope than an audit, the objective of which is the expression of an opinion regarding the financial statements as a whole and that accordingly the accountant does not express such an opinion. ⁶⁸ Including only those elements that the reporting standards for review of financial statements engagements require or permit helps ensure that auditors comply with the standards and that users of GAGAS reports have an understanding of the nature of the work performed and the results of the review engagement.

Distributing Reports

Requirement: Distributing Reports

7.93 Distribution of reports completed in accordance with GAGAS depends on the auditors' relationship with the audited organization and the nature of the information contained in the reports. If the subject matter involves material that is classified or contains confidential or sensitive information, auditors should limit report distribution. Auditors should document any limitation on report distribution.

- a. An audit organization in a government entity should distribute reports to those charged with governance, to the appropriate audited entity officials, and to the appropriate oversight bodies or organizations requiring or arranging for the engagements. As appropriate, auditors should also distribute copies of the reports to other officials who have legal oversight authority and to others authorized to receive such reports.
- b. A public accounting firm contracted to conduct a review of financial statements engagement in accordance with GAGAS should clarify report distribution responsibilities with the engaging party. If the contracting firm is responsible for the

⁶⁷AICPA, Professional Standards.

⁶⁸See para. .39(c)(vi) of AR-C section 90 (AICPA, *Professional Standards*).

distribution, it should reach agreement with the party contracting for the engagement about which officials or organizations will receive the report and the steps being taken to make the report available to the public.

Chapter 8: Fieldwork Standards for Performance Audits

8.01 This chapter contains fieldwork requirements and guidance for performance audits conducted in accordance with generally accepted government auditing standards (GAGAS). Fieldwork requirements establish an overall approach for auditors to apply in planning and performing an audit to obtain sufficient, appropriate evidence that provides a reasonable basis for findings and conclusions based on the audit objectives. For performance audits conducted in accordance with GAGAS, the requirements and guidance in chapters 1 through 5 and chapter 9 also apply.

8.02 The fieldwork requirements for performance audits relate to planning the audit; conducting the engagement; supervising staff; obtaining sufficient, appropriate evidence; and preparing audit documentation. The concepts of evidence, significance, and audit risk form a framework for applying these requirements and are included throughout the discussion of performance audits.

Planning

Requirements: General

- **8.03** Auditors must adequately plan the work necessary to address the audit objectives. Auditors must document the audit plan.
- **8.04** Auditors must plan the audit to reduce audit risk to an acceptably low level.
- **8.05** In planning the audit, auditors should assess significance and audit risk. Auditors should apply these assessments to establish the scope and methodology for addressing the audit objectives. Planning is a continuous process throughout the audit.
- **8.06** Auditors should design the methodology to obtain sufficient, appropriate evidence that provides a reasonable basis for findings and conclusions based on the audit objectives and to reduce audit risk to an acceptably low level.
- **8.07** Auditors should identify and use suitable criteria based on the audit objectives.

Application Guidance: General

- **8.08** The audit objectives are what the audit is intended to accomplish. They identify the audit subject matter and performance aspects to be included. Audit objectives can be thought of as questions about the program that the auditors seek to answer based on evidence obtained and assessed against criteria. Audit objectives may also pertain to the current status or condition of a program. The term program as used in GAGAS includes processes, projects, studies, policies, operations, activities, entities, and functions.
- **8.09** Auditors may need to refine or adjust the audit objectives, scope, and methodology as work is performed. However, in situations where the audit objectives are established by statute or legislative oversight, auditors may not have latitude to define or adjust the audit objectives or scope.
- **8.10** Scope is the boundary of the audit and is directly tied to the audit objectives. The scope defines the subject matter that the auditors will assess and report on, such as a particular program or aspect of a program, the necessary documents or records, the period of time reviewed, and the locations that will be included.
- **8.11** The methodology describes the nature and extent of audit procedures for gathering and analyzing evidence to address the audit objectives. Audit procedures are the specific steps and tests auditors perform to address the audit objectives.
- **8.12** Obtaining sufficient, appropriate evidence provides auditors with a reasonable basis for findings and conclusions that are valid, accurate, appropriate, and complete with respect to the audit objectives.
- **8.13** The sufficiency and appropriateness of evidence needed and tests of evidence are determined by the auditors based on the audit objectives, findings, and conclusions. Objectives for performance audits range from narrow to broad and involve varying types and quality of evidence. In some engagements, sufficient, appropriate evidence is available, but in others, information may have limitations. Professional judgment assists auditors in determining the audit scope and methodology needed to address the audit objectives and in evaluating whether sufficient, appropriate evidence has been obtained to address the audit objectives.

Chapter 8: Fieldwork Standards for Performance Audits

- **8.14** In performance audits conducted in accordance with GAGAS, auditors are the party who measures or evaluates the subject matter of the engagement and who presents the resulting information as part of, or accompanying, the audit report. Therefore, GAGAS does not require auditors to obtain management assertions with respect to the subject matter when conducting a performance audit.
- **8.15** The concept of significance assists auditors throughout a performance audit, including when deciding the type and extent of audit work to perform, when evaluating results of audit work, and when developing the report and related findings and conclusions. Significance is defined as the relative importance of a matter within the context in which it is being considered, including quantitative and qualitative factors. Such factors include the magnitude of the matter in relation to the subject matter of the audit, the nature and effect of the matter, the relevance of the matter, the needs and interests of an objective third party with knowledge of the relevant information, and the matter's effect on the audited program or activity. Professional judgment assists auditors when evaluating the significance of matters within the context of the audit objectives. In the performance audit requirements, the term significant is comparable to the term material as used in the context of financial statement engagements.
- **8.16** Audit risk is the possibility that the auditors' findings, conclusions, recommendations, or assurance may be improper or incomplete as a result of factors such as evidence that is not sufficient or appropriate, an inadequate audit process, or intentional omissions or misleading information because of misrepresentation or fraud. The assessment of audit risk involves both qualitative and quantitative considerations. Factors affecting audit risk include the time frames, complexity, or sensitivity of the work; size of the program in terms of dollar amounts and number of citizens served; adequacy of the audited entity's systems and processes for preventing and detecting inconsistencies, significant errors, or fraud; and auditors' access to records. Audit risk includes the risk that auditors will not detect a mistake, inconsistency, significant error, or fraud in the evidence supporting the audit. Audit risk can be reduced by taking actions such as increasing the scope of work; adding specialists, additional reviewers, and other resources to conduct the audit; changing the methodology to obtain additional evidence, higher-quality evidence, or alternative forms of corroborating evidence; or aligning the findings and conclusions to reflect the evidence obtained.

8.17 Criteria identify the required or desired state or expectation with respect to the program or operation. Criteria provide a context for evaluating evidence and understanding the findings, conclusions, and recommendations in the report. Suitable criteria are relevant, reliable, objective, and understandable and do not result in the omission of significant information, as applicable, within the context of the audit objectives. The relative importance of each of these characteristics to a particular engagement is a matter of professional judgment. In instances where laws, regulations, or policies prescribe the criteria to be used for the engagement, such criteria are presumed to be suitable in the absence of indications to the contrary.

8.18 Examples of criteria include

- **a.** laws and regulations applicable to the operation of the audited entity;
- **b.** goals, policies, and procedures established by officials of the audited entity;
- **c.** technically developed standards or norms;
- d. expert opinions;
- e. prior periods' performance;
- **f.** defined business practices;
- g. contracts or grant agreements; and
- **h.** benchmarks against which performance is compared, including performance of other entities or sectors.
- **8.19** For audit objectives that pertain to the current status or condition of a program, sufficient, appropriate evidence is gathered to provide reasonable assurance that the description of the current status or condition of a program is accurate and reliable and does not omit significant information relevant to the audit objectives. Information addressing the audit objectives is to be provided in an objective, understandable manner. The relative importance of each of the characteristics of the information to a particular engagement is a matter of professional judgment.

Auditor Communication

Requirements: Auditor Communication

- **8.20** Auditors should communicate an overview of the objectives, scope, and methodology and the timing of the performance audit and planned reporting (including any potential restrictions on the report), unless doing so could significantly impair the auditors' ability to obtain sufficient, appropriate evidence to address the audit objectives. Auditors should communicate such information with the following parties, as applicable:
 - **a.** management of the audited entity, including those with sufficient authority and responsibility to implement corrective action in the program or activity being audited;
 - **b.** those charged with governance;
 - **c.** the individuals contracting for or requesting audit services, such as contracting officials or grantees; or
 - d. the cognizant legislative committee, when auditors conduct the audit pursuant to a law or regulation or when they conduct the work for the legislative committee that has oversight of the audited entity.
- **8.21** In situations where the parties required to receive communications, as described in paragraph 8.20, are not clearly evident, auditors should document the process followed and conclusions reached in identifying the appropriate individuals to receive the required communications.
- **8.22** Auditors should retain any written communication resulting from paragraph 8.20 as audit documentation.

Application Guidance: Auditor Communication

8.23 Determining the form, content, and frequency of the communication with management or those charged with governance is a matter of professional judgment, although written communication is preferred. Auditors may use an engagement letter to communicate key information early in the engagement.

Chapter 8: Fieldwork Standards for Performance Audits

- **8.24** Examples of communications regarding the objectives, scope, methodology, and timing that could impair the auditors' ability to obtain sufficient, appropriate evidence include situations in which the auditors plan to perform unannounced cash counts or perform procedures related to indications of fraud.
- **8.25** Communicating with those charged with governance or management may include communicating deficiencies in internal control; fraud; or noncompliance with provisions of laws, regulations, contracts, and grant agreements. Early communication of these matters may be important because of their relative significance and the urgency for corrective follow-up action. Further, early communication is important to allow management to take prompt corrective action to prevent further occurrences when a control deficiency results in noncompliance with provisions of laws, regulations, contracts, and grant agreements or fraud. When a deficiency is communicated early, the reporting requirements and application guidance in paragraphs 9.29 through 9.44 still apply.
- **8.26** Because the governance structures of government entities and organizations can vary widely, it may not always be clearly evident who is charged with key governance functions. The process for identifying those charged with governance includes evaluating the organizational structure for directing and controlling operations to achieve the audited entity's objectives and how the audited entity delegates authority and establishes accountability for management.

Investigations or Legal Proceedings

Requirement: Investigations or Legal Proceedings

8.27 Auditors should inquire of management of the audited entity whether any investigations or legal proceedings significant to the audit objectives have been initiated or are in process with respect to the period under audit, and should evaluate the effect of initiated or inprocess investigations or legal proceedings on the current audit.

Application Guidance: Investigations or Legal Proceedings

8.28 Laws, regulations, or policies may require auditors to report indications of the following to law enforcement or investigatory authorities before performing additional audit procedures: certain types of fraud or noncompliance with provisions of laws, regulations, contracts, and grant agreements.

Chapter 8: Fieldwork Standards for Performance Audits

8.29 Avoiding interference with investigations or legal proceedings is important in pursuing indications of fraud and noncompliance with provisions of laws, regulations, contracts, and grant agreements. In some cases, it may be appropriate for the auditors to work with investigators or legal authorities or to withdraw from or defer further work on the engagement or a portion of the engagement to avoid interfering with an ongoing investigation or legal proceeding.

Results of Previous Engagements

Requirement: Results of Previous Engagements

8.30 Auditors should evaluate whether the audited entity has taken appropriate corrective action to address findings and recommendations from previous engagements that are significant within the context of the audit objectives. When planning the audit, auditors should ask management of the audited entity to identify previous engagements or other studies that directly relate to the objectives of the audit, including whether related recommendations have been implemented. Auditors should use this information in assessing risk and determining the nature, timing, and extent of current audit work, including determining the extent to which testing the implementation of the corrective actions is applicable to the current audit objectives.

Assigning Auditors

Requirements: Assigning Auditors

- **8.31** Audit management should assign sufficient auditors with adequate collective professional competence, as described in paragraphs 4.02 through 4.15, to conduct the audit. Staffing an audit includes, among other things,
 - **a.** assigning auditors with the collective knowledge, skills, and abilities appropriate for the audit;
 - **b.** assigning a sufficient number of auditors to the audit;
 - **c.** providing for on-the-job training of auditors; and

- d. engaging specialists when necessary.
- **8.32** If planning to use the work of specialists, auditors should document the nature and scope of the work to be performed by the specialists, including
 - **a.** the objectives and scope of the specialists' work,
 - **b.** the intended use of the specialists' work to support the audit objectives,
 - **c.** the specialists' procedures and findings so they can be evaluated and related to other planned audit procedures, and
 - **d.** the assumptions and methods used by the specialists.

Preparing a Written Audit Plan

Requirement: Preparing a Written Audit Plan

8.33 Auditors must prepare a written audit plan for each audit. Auditors should update the plan, as necessary, to reflect any significant changes to the plan made during the audit.

Application Guidance: Preparing a Written Audit Plan

- **8.34** The form and content of the written audit plan may vary among audits and may include an audit strategy, audit program, project plan, audit planning paper, or other appropriate documentation of key decisions about the audit objectives, scope, and methodology and the auditors' basis for those decisions.
- **8.35** A written audit plan provides an opportunity for audit organization management to supervise audit planning and to determine whether
 - **a.** the proposed audit objectives are likely to result in a useful report;
 - **b.** the audit plan adequately addresses relevant risks;

- **c.** the proposed audit scope and methodology are adequate to address the audit objectives;
- **d.** available evidence is likely to be sufficient and appropriate for purposes of the audit; and
- e. sufficient staff, supervisors, and specialists with adequate collective professional competence and other resources are available to conduct the audit and to meet expected time frames for completing the work.

Conducting the Engagement

Nature and Profile of the Program and User Needs

Requirement: Nature and Profile of the Program and User Needs

- **8.36** Auditors should obtain an understanding of the nature of the program or program component under audit and the potential use that will be made of the audit results or report as they plan a performance audit. The nature and profile of a program include
 - **a.** visibility, sensitivity, and relevant risks associated with the program under audit;
 - **b.** age of the program or changes in its condition;
 - **c.** the size of the program in terms of total dollars, number of citizens affected, or other measures;
 - **d.** level and extent of review or other forms of independent oversight;
 - e. the program's strategic plan and objectives; and
 - **f.** external factors or conditions that could directly affect the program.

Application Guidance: Nature and Profile of the Program and User Needs

- **8.37** One group of users of the audit report is government officials or other parties who authorize or request audits. Other important users of the audit report are the audited entity, those responsible for acting on the auditors' recommendations, oversight organizations, and legislative bodies. Other potential users of the audit report include legislators or government officials (other than those who authorized or requested the audit), the media, interest groups, and individual citizens. In addition to an interest in the program, potential users may have an ability to influence the conduct of the program. An awareness of these potential users' interests and influence can help auditors judge whether possible findings could be significant to relevant users.
- **8.38** Obtaining an understanding of the program under audit helps auditors to assess the relevant risks associated with the program and the effect of the risks on the audit objectives, scope, and methodology. The auditors' understanding may come from knowledge they already have about the program or knowledge they gain from inquiries, observations, and reviewing documents while planning the audit. The extent and breadth of those inquiries and observations will vary among audits based on the audit objectives, as will the need to understand individual aspects of the program, such as the following:
 - a. Provisions of laws, regulations, contracts, and grant agreements: Government programs are usually created by law and are subject to specific laws and regulations. Laws and regulations usually set forth what is to be done, who is to do it, the purpose to be achieved, the population to be served, and related funding guidelines or restrictions. Government programs may also be subject to contracts or grant agreements. Thus, understanding the laws and legislative history establishing a program and the provisions of contracts or grant agreements is essential to understanding the program itself. Obtaining that understanding is also a necessary step in identifying the provisions of laws, regulations, contracts, and grant agreements that are significant within the context of the audit objectives.
 - **b.** Purpose and goals: Purpose is the result or effect that is intended or desired from a program's operation. Legislatures usually establish a program's purpose when they provide authority for the program. Audited entity officials may provide more detailed

information on the program's purpose to supplement the authorizing legislation. Audited entity officials are sometimes asked to set goals for program performance and operations, including both output and outcome goals. Auditors may use the stated program purpose and goals as criteria for assessing program performance or may develop additional criteria to use when assessing performance.

- c. Internal control: Internal control is a process effected by an entity's oversight body, management, and other personnel that provides reasonable assurance that the objectives of an entity will be achieved. Internal control comprises the plans, methods, policies, and procedures used to fulfill the mission, strategic plan, goals, and objectives of the entity.
- d. Inputs: Inputs are the amount of resources (in terms of, for example, money, material, or personnel) that is put into a program. These resources may come from within or outside the entity operating the program. Measures of inputs can have a number of dimensions, such as cost, timing, and quality. Examples of measures of inputs are dollars spent, employee hours expended, and square feet of building space used.
- **e.** Program operations: Program operations are the strategies, processes, and activities management uses to convert inputs into outputs. Program operations may be subject to internal control.
- f. Outputs: Outputs represent the quantity of goods or services produced by a program. For example, an output measure for a job training program could be the number of persons completing training, and an output measure for an aviation safety inspection program could be the number of safety inspections completed.
- g. Outcomes: Outcomes are accomplishments or results of a program. For example, an outcome measure for a job training program could be the percentage of trained persons obtaining a job and still in the workplace after a specified period. An example of an outcome measure for an aviation safety inspection program could be the percentage reduction in safety problems found in subsequent inspections or the percentage of problems deemed corrected in follow-up inspections. Such outcome measures show the progress made in achieving the stated program purposes of helping unemployed citizens obtain and retain jobs and improving

the safety of aviation operations, respectively. Outcomes may be influenced by cultural, economic, physical, or technological factors outside the program. Auditors may use approaches drawn from other disciplines, such as program evaluation, to isolate the effects of the program from these other influences. Outcomes also include a program's unexpected or unintentional effects, both positive and negative.

Determining Significance and Obtaining an Understanding of Internal Control

Requirements: Determining Significance and Obtaining an Understanding of Internal Control

- **8.39** Auditors should determine and document whether internal control is significant to the audit objectives.⁶⁹
- **8.40** If it is determined that internal control is significant to the audit objectives, auditors should obtain an understanding of such internal control.

Application Guidance: Determining Significance and Obtaining an Understanding of Internal Control

- **8.41** Consideration of internal control in a performance audit begins with determining the significance of internal control to the audit objectives and documenting that determination. Some factors that may be considered when determining the significance of internal control to the audit objectives include
 - **a.** the subject matter under audit, such as the program or program component under audit, including the audited entity's objectives for the program and associated inherent risks;
 - **b.** the nature of findings and conclusions expected to be reported, based on the needs and interests of audit report users;

⁶⁹See fig.4 at the end of ch. 8 for a flowchart on consideration of internal control in a GAGAS performance audit.

- **c.** the three categories of entity objectives (operations, reporting, and compliance);⁷⁰ and
- **d.** the five components of internal control (control environment, risk assessment, control activities, information and communication, and monitoring) and the integration of the components.
- **8.42** If internal control is significant to the audit objectives, auditors determine which of the five components of internal control and underlying principles are significant to the audit objectives, as all components of internal control are generally relevant, but not all components may be significant to the audit objectives. This determination can also identify whether specific controls are significant to the audit objectives. Determining which internal control components and principles and/or specific controls are significant to the audit objectives is a matter of professional judgment.
- **8.43** Determining the significance of internal control may be an iterative process. As discussed in paragraph 8.09, the audit objectives can evolve and become more refined throughout the audit. When this occurs, the significance of internal control is determined and documented for the new or revised objectives.
- **8.44** Determining the significance of internal control may be documented in formats such as narratives or tables. The documentation includes the conclusions on whether internal control is significant to the audit objectives, and if so, which components of internal control are significant to the audit objectives. The documentation may also include the factors considered and steps taken to perform the determination.
- **8.45** Determining the significance of internal control to the audit objectives affects the audit planning required in paragraphs 8.03 through 8.07. Specifically, it enables auditors to determine whether to assess internal control as part of the audit and, if they do, to identify criteria for the assessment and plan the appropriate scope, methodology, and extent of internal control assessments to perform.

⁷⁰The terminology used in this section is consistent with the definitions and concepts in the Committee of Sponsoring Organizations of the Treadway Commission's *Internal Control—Integrated Framework* (COSO Framework) and *Standards for Internal Control in the Federal Government* (GAO-14-704G) (Green Book).

- **8.46** The nature and extent of procedures auditors perform to obtain an understanding of internal control is a matter of professional judgment and may vary among audits based on audit objectives, audit risk, internal control deficiencies, and the auditors' knowledge about internal control gained in prior audits. The understanding of internal control builds on the understanding of the program required in paragraph 8.36. The auditors' understanding of internal control may be obtained through procedures such as inquiries, observations, inspection of documents and records, review of other audit reports, or direct tests.
- **8.47** Approaches for obtaining an understanding of internal control may vary and may include consideration of entity-level controls, transaction-level controls, or both. However, even when assessing only transaction-level controls, it may be beneficial to gain an understanding of entity-level controls that may affect transaction-level controls by obtaining a broad understanding of the five components of internal control at the entity level. This involves considering the relationships between the components, which work together in an integrated manner in an effective internal control system, and the principles of internal control that support each component. In addition to obtaining a broad understanding of internal control at the entity level, auditors may also obtain an understanding of internal control at the transaction level for the specific programs and processes under audit.
- **8.48** Obtaining an understanding of internal control assists auditors in identifying an audited entity's key controls relevant to the audit objectives. Identifying key controls involves considering the entity's objectives that are relevant to the audit and whether the entity has controls in place to achieve those objectives and address associated risks. Collectively, key controls are those controls necessary to achieve the entity's control objectives and provide reasonable assurance of achieving the entity's objectives. Key controls often have one or both of the following characteristics:
 - a. Their failure may significantly affect the achievement of the entity's objectives, yet not reasonably be detected in a timely manner by other controls.
 - **b.** Their operation may prevent or detect other control failures before they have an opportunity to become significant to the achievement of the entity's objectives.

Assessing Internal Control

Requirement: Assessing Internal Control

8.49 If internal control is determined to be significant to the audit objectives, auditors should assess and document their assessment of the design, implementation, and/or operating effectiveness of such internal control to the extent necessary to address the audit objectives.

Application Guidance: Assessing Internal Control

- **8.50** The auditors' understanding of internal control provides a basis for determining the nature, timing, and extent of procedures for assessments of internal control, if such an assessment will be performed. Assessments of internal control in a performance audit are performed to the extent necessary to address the audit objectives. The levels of internal control assessment that may be performed based on the audit objectives are (1) assessing the design; (2) assessing the design and implementation; or (3) assessing the design, implementation, and operating effectiveness of controls that are significant to the audit objectives.
- **8.51** Assessments of internal control involve designing and performing procedures to obtain sufficient, appropriate evidence, as required in paragraphs 8.90 through 8.94, to support and document the auditors' findings and conclusions on design, implementation, and/or operating effectiveness of controls that are significant to the audit objectives. The controls being assessed are generally the key controls identified during the planning phase of the engagement, which may include controls at both the entity and transaction levels. Changes may be made to the initial determination of key controls based on additional information gathered during the course of fieldwork.
- **8.52** The design of internal control is assessed by determining whether controls individually and in combination are capable of achieving an objective and addressing the related risk. The implementation of internal control is assessed by determining if the control exists and has been placed into operation. The operating effectiveness of internal control is assessed by determining whether controls were applied at relevant times during the period under evaluation, the consistency with which they were applied, and by whom or by what means they were applied. A control cannot be effectively implemented if it was not effectively designed. A control cannot be operating effectively if it was not effectively designed and implemented.

8.53 During the assessment of each control, deficiencies in internal control may be identified. A deficiency in internal control exists when the design, implementation, or operation of a control does not allow management or personnel to achieve control objectives and address related risks. ⁷¹ A deficiency in design exists when a necessary control is missing or is not properly designed so that even if the control operates as designed, the control objective would not be met. A deficiency in implementation exists when a control is properly designed but not implemented correctly in the internal control system. A deficiency in operating effectiveness exists when a properly designed control does not operate as designed or the person performing the control does not have the necessary competence or authority to perform the control effectively.

Internal Control Deficiencies Considerations

Requirement: Internal Control Deficiencies Considerations

8.54 Auditors should evaluate and document the significance of identified internal control deficiencies within the context of the audit objectives.

Application Guidance: Internal Control Deficiencies Considerations

- **8.55** Internal control deficiencies are evaluated for significance within the context of the audit objectives. Deficiencies are evaluated both on an individual basis and in the aggregate. Consideration is given to the correlation among deficiencies. This evaluation and the audit work performed form the basis of the auditors' determination whether, individually or in combination, the deficiencies are significant within the context of the audit objectives.⁷²
- **8.56** Determining whether deficiencies are significant within the context of the audit objectives involves evaluating the following factors:
 - a. Magnitude of impact: Magnitude of impact refers to the likely effect that the deficiency could have on the entity achieving its objectives and is affected by factors such as the size, pace, and duration of

⁷¹See paras. 1.27g and 1.27k for definitions of control objective and entity objective.

⁷²See paras. 9.29 through 9.34 for a discussion of reporting on internal control.

- the deficiency's impact. A deficiency may be more significant to one objective than another.
- **b.** Likelihood of occurrence: Likelihood of occurrence refers to the possibility of a deficiency impacting an entity's ability to achieve its objectives.
- c. Nature of the deficiency: The nature of the deficiency involves factors such as the degree of subjectivity involved with the deficiency and whether the deficiency arises from fraud or misconduct.
- **8.57** Internal control deficiencies are a type of finding, and the requirements related to developing the four elements of a finding in paragraph 8.116 apply. When determining the cause of internal control deficiencies, it may be helpful for auditors to perform an analysis to identify the root cause of the deficiencies. Identifying the root causes of internal control deficiencies may strengthen the quality of auditors' recommendations for corrective actions.
- **8.58** The following are examples of control deficiencies:
 - **a.** Ineffective oversight by those charged with governance of the entity's financial reporting, performance reporting, or internal control, or an ineffective overall governance structure.
 - b. An ineffective internal audit function or risk assessment function at an entity for which such functions are important to the monitoring or risk assessment component of internal control, such as for a large or complex entity.
 - c. Failure by management or those charged with governance to assess the effect of a deficiency previously communicated to them and either to correct it or to conclude that it does not need to be corrected.
 - **d.** Inadequate controls for the safeguarding of assets.
 - e. Inadequate design of information systems general, application, and user controls that prevents an information system from providing complete and accurate information consistent with financial, compliance, or performance reporting objectives or other current needs.

- **f.** Failure of an application control caused by a deficiency in the design or operation of an information system's general controls.
- **g.** Employees or management who lack the qualifications and training to fulfill their assigned functions.

Information Systems Controls Considerations

Requirements: Information Systems Controls Considerations

- **8.59** The effectiveness of significant internal controls frequently depends on the effectiveness of information systems controls. Thus, when obtaining an understanding of internal control significant to the audit objectives, auditors should also determine whether it is necessary to evaluate information systems controls.
- **8.60** When information systems controls are determined to be significant to the audit objectives or when the effectiveness of significant controls depends on the effectiveness of information systems controls, auditors should then evaluate the design, implementation, and/or operating effectiveness of such controls. This evaluation includes other information systems controls that affect the effectiveness of the significant controls or the reliability of information used in performing the significant controls. Auditors should obtain a sufficient understanding of information systems controls necessary to assess audit risk and plan the audit within the context of the audit objectives.
- **8.61** Auditors should determine which audit procedures related to information systems controls are needed to obtain sufficient, appropriate evidence to support the audit findings and conclusions.
- **8.62** When evaluating information systems controls is an audit objective, auditors should test information systems controls to the extent necessary to address the audit objective.

Application Guidance: Information Systems Controls Considerations

8.63 Understanding information systems controls is important when information systems are used extensively throughout the program under audit and the fundamental business processes related to the audit objectives rely on information systems. Information systems controls consist of those internal controls that depend on information systems

processing and include general controls, application controls, and user controls.

- a. Information systems general controls (entity-wide, system, and application levels) are the policies and procedures that apply to all or a large segment of an entity's information systems. General controls help ensure the proper operation of information systems by creating the environment for proper operation of application controls. General controls include security management, logical and physical access, configuration management, segregation of duties, and contingency planning.
- b. Application controls, sometimes referred to as business process controls, are those controls that are incorporated directly into computer applications to help ensure the validity, completeness, accuracy, and confidentiality of transactions and data during application processing. Application controls include controls over input, processing, output, master file, interface, and the data management system.
- c. User controls are portions of controls that are performed by people interacting with information systems controls. A user control is an information systems control if its effectiveness depends on information systems processing or the reliability (accuracy, completeness, and validity) of information processed by information systems.
- **8.64** An entity's use of information systems controls may be extensive; however, auditors are primarily interested in those information systems controls that are significant to the audit objectives. Information systems controls are significant to the audit objectives if auditors determine that it is necessary to evaluate the effectiveness of these controls in order to obtain sufficient, appropriate evidence. For example, an audit objective may involve evaluating the effectiveness of information systems controls related to certain systems, facilities, or entities.
- **8.65** Audit procedures to evaluate the effectiveness of significant information systems controls include (1) gaining an understanding of the system as it relates to the information and (2) identifying and evaluating the general, application, and user controls that are critical to providing assurance over the reliability of the information required for the audit.

- **8.66** The evaluation of information systems controls may be done in conjunction with the auditors' consideration of internal control within the context of the audit objectives or as a separate audit objective or audit procedure, depending on the audit's objectives. Depending on the significance of information systems controls to the audit objectives, the extent of audit procedures to obtain such an understanding may be limited or extensive. In addition, the nature and extent of audit risk related to information systems controls are affected by the hardware and software used, the configuration of the entity's systems and networks, and the entity's information systems strategy.
- **8.67** The following factors may assist auditors in determining the significance of information system controls to the audit objectives:
 - **a.** The extent to which internal controls that are significant to the audit depend on the reliability of information processed or generated by information systems.
 - b. The availability of evidence outside the information system to support the findings and conclusions. It may not be possible for auditors to obtain sufficient, appropriate evidence without evaluating the effectiveness of relevant information systems controls. For example, if information supporting the findings and conclusions is generated by information systems or its reliability depends on information systems controls, there may not be sufficient supporting or corroborating information or documentary evidence available other than that produced by the information systems.
 - c. The relationship of information systems controls to data reliability. To obtain evidence about the reliability of computer-generated information, auditors may decide to evaluate the effectiveness of information systems controls as part of obtaining evidence about the reliability of the data. If the auditors conclude that information systems controls are effective, they may reduce the direct testing of data.

Provisions of Laws, Regulations, Contracts, and Grant Agreements

Requirement: Provisions of Laws, Regulations, Contracts, and Grant Agreements

8.68 Auditors should identify any provisions of laws, regulations, contracts, and grant agreements that are significant within the context of the audit objectives and assess the risk that noncompliance with provisions of laws, regulations, contracts, and grant agreements could occur. Based on that risk assessment, the auditors should design and perform procedures to obtain reasonable assurance of detecting instances of noncompliance with provisions of laws, regulations, contracts, and grant agreements that are significant within the context of the audit objectives.

Application Guidance: Provisions of Laws, Regulations, Contracts, and Grant Agreements

8.69 Government programs are subject to many provisions of laws, regulations, contracts, and grant agreements. At the same time, these provisions' significance within the context of the audit objectives varies widely, depending on the objectives of the audit. Auditors may consult with their legal counsel to (1) determine those laws and regulations that are significant to the audit objectives, (2) design tests of compliance with provisions of laws and regulations, and (3) evaluate the results of those tests. Auditors also may consult with their legal counsel when audit objectives require testing compliance with provisions of contracts or grant agreements. Depending on the circumstances of the audit, auditors may consult with others, such as investigative staff, other audit organizations or government entities that provided professional services to the audited entity, or law enforcement authorities, to obtain information on compliance matters.

8.70 The auditors' assessment of audit risk may be affected by such factors as the complexity or recent establishment of the laws, regulations, contracts, and grant agreements. The auditors' assessment of audit risk also may be affected by whether the audited entity has controls that are effective in preventing or detecting noncompliance with provisions of laws, regulations, contracts, and grant agreements. If auditors obtain sufficient, appropriate evidence of the effectiveness of these controls, they can reduce their tests of compliance.

Fraud

Requirements: Fraud

- **8.71** Auditors should assess the risk of fraud occurring that is significant within the context of the audit objectives. Audit team members should discuss among the team fraud risks, including factors such as individuals' incentives or pressures to commit fraud, the opportunity for fraud to occur, and rationalizations or attitudes that could increase the risk of fraud. Auditors should gather and assess information to identify the risk of fraud that is significant within the scope of the audit objectives or that could affect the findings and conclusions.
- **8.72** Assessing the risk of fraud is an ongoing process throughout the audit. When information comes to the auditors' attention indicating that fraud, significant within the context of the audit objectives, may have occurred, auditors should extend the audit steps and procedures, as necessary, to (1) determine whether fraud has likely occurred and (2) if so, determine its effect on the audit findings.

Application Guidance: Fraud

- **8.73** Fraud involves obtaining something of value through willful misrepresentation. Whether an act is, in fact, fraud is determined through the judicial or other adjudicative system and is beyond auditors' professional responsibility.
- **8.74** Auditors may obtain information through discussion with officials of the audited entity or through other means to determine the susceptibility of a program to fraud, the extent to which the audited entity has implemented leading practices to manage fraud risks, the status of internal controls the audited entity has established to prevent and detect fraud, or the risk that officials of the audited entity could override internal control. An attitude of professional skepticism in assessing the risk of fraud assists auditors in assessing which factors or risks could significantly affect the audit objectives.
- **8.75** In some circumstances, conditions such as the following could indicate a heightened risk of fraud:
 - **a.** economic, programmatic, or entity operating conditions that threaten the entity's financial stability, viability, or budget;

- **b.** the nature of the entity's operations provide opportunities to engage in fraud;
- **c.** management's monitoring of compliance with laws, regulations, and policies is inadequate;
- **d.** the organizational structure is unstable or unnecessarily complex;
- **e.** management communication or support for ethical standards is lacking;
- **f.** management is willing to accept unusually high levels of risk in making significant decisions;
- g. the entity has a history of impropriety, such as previous issues with fraud, questionable practices, or past audits or investigations with findings of questionable or criminal activity;
- **h.** operating policies and procedures have not been developed or are outdated;
- i. key documentation is lacking or does not exist;
- j. asset accountability or safeguarding procedures are lacking;
- **k.** a history of improper payments;
- I. evidence of false or misleading information; and
- m. evidence of unusual patterns and trends in contracting, procurement, acquisition, and other activities of the entity or program.
- **8.76** If fraud that may have occurred is not significant within the context of the audit objectives, the auditors may perform additional audit work as a separate engagement or refer the matter to other parties with oversight responsibility or jurisdiction.

Identifying Sources of Evidence and the Amount and Type of Evidence Required

Requirements: Identifying Sources of Evidence and the Amount and Type of Evidence Required

- **8.77** Auditors should identify potential sources of information that could be used as evidence. Auditors should determine the amount and type of evidence needed to obtain sufficient, appropriate evidence to address the audit objectives and adequately plan audit work.
- **8.78** Auditors should evaluate whether any lack of sufficient, appropriate evidence is caused by internal control deficiencies or other program weaknesses, and whether the lack of sufficient, appropriate evidence could be the basis for audit findings.

Application Guidance: Identifying Sources of Evidence and the Amount and Type of Evidence Required

8.79 If auditors believe it is likely that sufficient, appropriate evidence will not be available, they may revise the audit objectives or modify the scope and methodology and determine alternative procedures to obtain additional evidence or other forms of evidence to address the current audit objectives.

Using the Work of Others

Requirements: Using the Work of Others

- **8.80** Auditors should determine whether other auditors have conducted, or are conducting, audits that could be relevant to the current audit objectives.
- **8.81** If auditors use the work of other auditors, they should perform procedures that provide a sufficient basis for using that work. Auditors should obtain evidence concerning the other auditors' qualifications and independence and should determine whether the scope, quality, and timing of the audit work performed by the other auditors can be relied on in the context of the current audit objectives.⁷³

 $^{^{73}}$ See para. 5.80 for additional discussion on using the work of other auditors and peer review reports.

8.82 If the engagement team intends to use the work of a specialist, it should assess the independence of the specialist.⁷⁴

Application Guidance: Using the Work of Others

- **8.83** The results of other auditors' work may be useful sources of information for planning and conducting the audit. If other auditors have identified areas that warrant further audit work or follow-up, their work may influence the auditors' selection of objectives, scope, and methodology.
- **8.84** Internal auditing is an important part of overall governance, accountability, and internal control. A key role of many internal audit organizations is to provide assurance that internal controls are in place to adequately mitigate risks and achieve program goals and objectives. Auditors may determine that it is appropriate to use the work of the internal auditors in assessing the effectiveness of design or operation of internal controls that are significant within the context of the audit objectives.
- **8.85** If other auditors have completed audit work related to the objectives of the current audit, the current auditors may be able to use the work of the other auditors to support findings or conclusions for the current audit and thereby avoid duplication of effort. Procedures that auditors may perform in making this determination include reviewing the other audit report, audit plan, or audit documentation, or performing tests of the other auditors' work. The nature and extent of evidence needed will depend on the significance of the other auditors' work to the current audit objectives and the extent to which the auditors will use that work.
- **8.86** The engagement team's assessment of the independence of specialists who perform audit work includes identifying threats and applying any necessary safeguards in the same manner as they would for auditors performing work on those audits.⁷⁵

⁷⁴See para. 1.27p for the definition of specialist.

⁷⁵See paras. 3.18 through 3.108 for requirements and guidance related to independence.

Supervision

Requirement: Supervision

8.87 Auditors must properly supervise audit staff.

Application Guidance: Supervision

- **8.88** Audit supervision involves providing sufficient guidance and direction to auditors assigned to the audit to address the audit objectives and follow applicable requirements, while staying informed about significant problems encountered, reviewing the work performed, and providing effective on-the-job training.
- **8.89** The nature and extent of the auditors' supervision and the review of audit work may vary depending on a number of factors, such as the size of the audit organization, the significance of the work, and the experience of the auditors.

Evidence

Requirements: Evidence

- **8.90** Auditors must obtain sufficient, appropriate evidence to provide a reasonable basis for addressing the audit objectives and supporting their findings and conclusions.
- **8.91** In assessing the appropriateness of evidence, auditors should assess whether the evidence is relevant, valid, and reliable.
- **8.92** In determining the sufficiency of evidence, auditors should determine whether enough appropriate evidence exists to address the audit objectives and support the findings and conclusions to the extent that would persuade a knowledgeable person that the findings are reasonable.
- **8.93** When auditors use information provided by officials of the audited entity as part of their evidence, they should determine what the officials of the audited entity or other auditors did to obtain assurance over the reliability of the information.
- **8.94** Auditors should evaluate the objectivity, credibility, and reliability of testimonial evidence.

Application Guidance: Evidence

- **8.95** Audit objectives may vary widely, as may the level of work necessary to assess the sufficiency and appropriateness of evidence to address the objectives. The concepts of audit risk and significance assist auditors in evaluating the audit evidence. Professional judgment assists auditors in determining the sufficiency and appropriateness of evidence taken as a whole. Interpreting, summarizing, or analyzing evidence is typically used in determining the sufficiency and appropriateness of evidence and in reporting the results of the audit work.
- **8.96** When auditors use information that audited entity officials provided as part of their evidence, auditors may find it necessary to test management's procedures to obtain assurance, perform direct testing of the information, or obtain additional corroborating evidence. The nature, timing, and extent of the auditors' procedures will depend on the significance of the information to the audit objectives and the nature of the information being used. Using a risk-based approach, auditors may consider additional procedures if they become aware of evidence that conflicts with that provided by management. In their overall assessment, auditors may document how they resolved situations involving conflicting evidence. ⁷⁶
- **8.97** Auditors may request that management provide written representations as to the accuracy and completeness of information provided.
- **8.98** The nature, timing, and extent of audit procedures to assess sufficiency and appropriateness are affected by the effectiveness of the audited entity's internal controls over the information, including information systems controls, and the significance of the information and the level of detail presented in the auditors' findings and conclusions in the context of the audit objectives. The sufficiency and appropriateness of computer-processed information is assessed regardless of whether this information is provided to auditors or auditors independently extract it. Assessing the sufficiency and appropriateness of computer-processed information includes considering the completeness and accuracy of the data for the intended purposes.

 $^{^{76}}$ See para. 8.105 for a discussion of the relationship between testimonial and documentary evidence.

Sufficiency

- **8.99** Sufficiency is a measure of the quantity of evidence used to support the findings and conclusions related to the audit objectives.
- **8.100** When appropriate, auditors may use statistical methods to analyze and interpret evidence to assess its sufficiency.
- **8.101** The sufficiency of evidence required to support the auditors' findings and conclusions is a matter of the auditors' professional judgment. The following presumptions are useful in judging the sufficiency of evidence.
 - **a.** The greater the audit risk, the greater the quantity and quality of evidence required.
 - **b.** Stronger evidence may allow less evidence to be used.

Appropriateness

- **8.102** Appropriateness is the measure of the quality of evidence that encompasses the relevance, validity, and reliability of evidence used for addressing the audit objectives and supporting findings and conclusions.
 - **a.** Relevance refers to the extent to which evidence has a logical relationship with, and importance to, the issue being addressed.
 - b. Validity refers to the extent to which evidence is a meaningful or reasonable basis for measuring what is being evaluated. In other words, validity refers to the extent to which evidence represents what it is purported to represent.
 - c. Reliability refers to the consistency of results when information is measured or tested and includes the concepts of being verifiable or supported. For example, in establishing the appropriateness of evidence, auditors may test its reliability by obtaining supporting evidence, using statistical testing, or obtaining corroborating evidence.
 - **d.** Having a large volume of evidence does not compensate for a lack of relevance, validity, or reliability.

- **8.103** The degree of assurance associated with a performance audit is strongly associated with the appropriateness of evidence in relation to the audit objectives. Examples follow.
 - a. The audit objectives might focus on verifying specific quantitative results presented by the audited entity. In these situations, the audit procedures would likely focus on obtaining evidence about the accuracy of the specific amounts in question. This work may include the use of statistical sampling.
 - b. The audit objectives might focus on the performance of a specific program or activity in the audited entity. In these situations, the auditors may be provided information that the audited entity compiled in order to satisfy the audit objectives. The auditors may find it necessary to test the quality of the information, which includes both its validity and reliability.
 - c. The audit objectives might focus on information that is used for widely accepted purposes and obtained from sources generally recognized as appropriate. For example, economic statistics issued by government agencies for purposes such as adjusting for inflation, or other such information issued by authoritative organizations, may be the best information available. In such cases, it may not be practical or necessary for auditors to perform procedures to verify the information. These decisions call for use of professional judgment based on the nature of the information, its common usage or acceptance, and how it is being used in the audit.
 - d. The audit objectives might focus on comparisons or benchmarking between various government functions or agencies. These types of audits are especially useful for analyzing the outcomes of various public policy decisions. In these cases, auditors may perform analyses, such as comparative statistics of different jurisdictions or changes in performance over time, where it would be impractical to verify the detailed data underlying the statistics. Clear disclosure of the extent to which comparative information or statistics were evaluated or corroborated will likely be necessary to place the evidence in context for report users.
 - e. The audit objectives might focus on trend information based on data that the audited entity provided. In this situation, auditors may assess the evidence by using overall analytical tests of underlying

data, combined with knowledge and understanding of the systems or processes used for compiling information.

- f. The audit objectives might focus on identifying emerging and crosscutting issues using information that audited entities compiled or self-reported. In such cases, it may be helpful for the auditors to consider the overall appropriateness of the compiled information along with other information available about the program. Other sources of information, such as inspector general reports or other external audits, may provide the auditors with information regarding whether any unverified or self-reported information is consistent with or can be corroborated by these other external sources of information.
- 8.104 In terms of its form and how it is collected, evidence may be categorized as physical, documentary, or testimonial. Physical evidence is obtained by auditors' direct inspection or observation of people, property, or events. Such evidence may be documented in summary memos, photographs, videos, drawings, charts, maps, or physical samples. Documentary evidence is already existing information, such as letters, contracts, accounting records, invoices, spreadsheets, database extracts, electronically stored information, and management information on performance. Testimonial evidence is obtained through inquiries. interviews, focus groups, public forums, or questionnaires. Auditors frequently use analytical processes, including computations, comparisons, separation of information into components, and rational arguments, to analyze any evidence gathered to determine whether it is sufficient and appropriate. Evidence may be obtained by observation, inquiry, or inspection. Each type of evidence has its own strengths and weaknesses. The following contrasts are useful in judging the appropriateness of evidence. However, these contrasts are not adequate in themselves to determine appropriateness. The nature and types of evidence used to support auditors' findings and conclusions are matters of the auditors' professional judgment based on the audit objectives and audit risk.
 - a. Evidence obtained when internal control is effective is generally more reliable than evidence obtained when internal control is weak or nonexistent.⁷⁷

⁷⁷See paras. 8.39 through 8.67 for a discussion of internal control.

- **b.** Evidence obtained through the auditors' direct physical examination, observation, computation, and inspection is generally more reliable than evidence obtained indirectly.
- **c.** Examination of original documents is generally more reliable than examination of copies.
- d. Testimonial evidence obtained under conditions in which persons may speak freely is generally more reliable than evidence obtained under circumstances in which the persons may be intimidated.
- e. Testimonial evidence obtained from an individual who is not biased and has direct knowledge about the area is generally more reliable than testimonial evidence obtained from an individual who is biased or has indirect or partial knowledge about the area.
- f. Evidence obtained from a knowledgeable, credible, and unbiased third party is generally more reliable than evidence obtained from management of the audited entity or others who have a direct interest in the audited entity.
- **8.105** Testimonial evidence may be useful in interpreting or corroborating documentary or physical information. Documentary evidence may be used to help verify, support, or challenge testimonial evidence.
- **8.106** Surveys generally provide self-reported information about existing conditions or programs. Evaluating the survey design and administration assists auditors in evaluating the objectivity, credibility, and reliability of the self-reported information.
- **8.107** When sampling is used, the appropriate selection method will depend on the audit objectives. When a representative sample is needed, the use of statistical sampling approaches generally results in stronger evidence than that obtained from nonstatistical techniques. When a representative sample is not needed, a targeted selection may be effective if the auditors have isolated risk factors or other criteria to target the selection.

Overall Assessment of Evidence

Requirements: Overall Assessment of Evidence

- **8.108** Auditors should perform and document an overall assessment of the collective evidence used to support findings and conclusions, including the results of any specific assessments performed to conclude on the validity and reliability of specific evidence.
- **8.109** When assessing the overall sufficiency and appropriateness of evidence, auditors should evaluate the expected significance of evidence to the audit objectives, findings, and conclusions; available corroborating evidence; and the level of audit risk. If auditors conclude that evidence is not sufficient or appropriate, they should not use such evidence as support for findings and conclusions.
- **8.110** When the auditors identify limitations or uncertainties in evidence that is significant to the audit findings and conclusions, they should perform additional procedures, as appropriate.

Application Guidance: Overall Assessment of Evidence

- **8.111** Professional judgments about the sufficiency and appropriateness of evidence are closely interrelated, as auditors interpret the results of audit testing and evaluate whether the nature and extent of the evidence obtained is sufficient and appropriate.
- **8.112** Sufficiency and appropriateness of evidence are relative concepts, which may be thought of as a continuum rather than as absolutes. Sufficiency and appropriateness are evaluated in the context of the related findings and conclusions. For example, even though the auditors may identify some limitations or uncertainties about the sufficiency or appropriateness of some of the evidence, they may nonetheless determine that in total there is sufficient, appropriate evidence to support the findings and conclusions.
- **8.113** The steps to assess evidence may depend on the nature of the evidence, how the evidence is used in the audit or report, and the audit objectives.
 - a. Evidence is sufficient and appropriate when it provides a reasonable basis for supporting the findings or conclusions within the context of the audit objectives.

- **b.** Evidence is not sufficient or appropriate when (1) using the evidence carries an unacceptably high risk that it could lead auditors to reach an incorrect or improper conclusion; (2) the evidence has significant limitations, given the audit objectives and intended use of the evidence; or (3) the evidence does not provide an adequate basis for addressing the audit objectives or supporting the findings and conclusions.
- **8.114** Evidence has limitations or uncertainties when its validity or reliability has not been assessed or cannot be assessed, given the audit objectives and the intended use of the evidence. Limitations also include errors identified by the auditors in their testing.
- **8.115** Additional procedures that could address limitations or uncertainties in evidence that are significant to the audit findings and conclusions include
 - **a.** seeking independent, corroborating evidence from other sources;
 - **b.** redefining the audit objectives or the audit scope to eliminate the need to use the evidence;
 - c. presenting the findings and conclusions so that the supporting evidence is sufficient and appropriate and describing in the report the limitations or uncertainties with the validity or reliability of the evidence, if such disclosure is necessary to avoid misleading the report users about the findings or conclusions; and
 - d. determining whether to report the limitations or uncertainties as a finding, including any related significant internal control deficiencies.

Findings

Requirements: Findings

- **8.116** As part of a performance audit, when auditors identify findings, they should plan and perform procedures to develop the criteria, condition, cause, and effect of the findings to the extent that these elements are relevant and necessary to achieve the audit objectives.
- **8.117** Auditors should consider internal control deficiencies in their

evaluation of identified findings when developing the cause element of the identified findings when internal control is significant to the audit objectives.

Application Guidance: Findings

- **8.118** Findings may involve deficiencies in internal control; noncompliance with provisions of laws, regulations, contracts, and grant agreements; or instances of fraud.
- **8.119** Given the concept of accountability for use of public resources and government authority, evaluating internal control in a government environment may also include considering internal control deficiencies that result in waste or abuse. Because the determination of waste and abuse is subjective, auditors are not required to perform specific procedures to detect waste or abuse in performance audits. However, auditors may consider whether and how to communicate such matters if they become aware of them. Auditors may also discover that waste or abuse are indicative of fraud or noncompliance with provisions of laws, regulations, contracts, and grant agreements.
- **8.120** Waste is the act of using or expending resources carelessly, extravagantly, or to no purpose. Importantly, waste can include activities that do not include abuse and does not necessarily involve a violation of law. Rather, waste relates primarily to mismanagement, inappropriate actions, and inadequate oversight.
- **8.121** The following are examples of waste, depending on the facts and circumstances:
 - **a.** Making travel choices that are contrary to existing travel policies or are unnecessarily extravagant or expensive.
 - **b.** Making procurement or vendor selections that are contrary to existing policies or are unnecessarily extravagant or expensive.
- **8.122** Abuse is behavior that is deficient or improper when compared with behavior that a prudent person would consider reasonable and necessary business practice given the facts and circumstances, but excludes fraud and noncompliance with provisions of laws, regulations, contracts, and grant agreements. Abuse also includes misuse of authority or position for

personal financial interests or those of an immediate or close family member or business associate.

- **8.123** The following are examples of abuse, depending on the facts and circumstances:
 - **a.** Creating unneeded overtime.
 - **b.** Requesting staff to perform personal errands or work tasks for a supervisor or manager.
 - c. Misusing the official's position for personal gain (including actions that could be perceived by an objective third party with knowledge of the relevant information as improperly benefiting an official's personal financial interests or those of an immediate or close family member; a general partner; an organization for which the official serves as an officer, director, trustee, or employee; or an organization with which the official is negotiating concerning future employment).
- **8.124** Criteria: To develop findings, criteria may include the laws, regulations, contracts, grant agreements, standards, measures, expected performance, defined business practices, and benchmarks against which performance is compared or evaluated. Criteria identify the required or desired state or expectation with respect to the program or operation. The term program includes processes, projects, studies, policies, operations, activities, entities, and functions. Criteria provide a context for evaluating evidence and understanding the findings, conclusions, and recommendations in the report.
- **8.125** Condition: Condition is a situation that exists. The condition is determined and documented during the audit.
- **8.126** Cause: The cause is the factor or factors responsible for the difference between the condition and the criteria, and may also serve as a basis for recommendations for corrective actions. Common factors include poorly designed policies, procedures, or criteria; inconsistent, incomplete, or incorrect implementation; or factors beyond the control of program management. Auditors may assess whether the evidence provides a reasonable and convincing argument for why the stated cause is the key factor contributing to the difference between the condition and the criteria.

- **8.127** Effect or potential effect: The effect or potential effect is the outcome or consequence resulting from the difference between the condition and the criteria. When the audit objectives include identifying the actual or potential consequences of a condition that varies (either positively or negatively) from the criteria identified in the audit, effect is a measure of those consequences. Effect or potential effect may be used to demonstrate the need for corrective action in response to identified problems or relevant risks.
- **8.128** The elements needed for a finding are related to the objectives of the audit. Thus, a finding or set of findings is complete to the extent that the audit objectives are addressed and the report clearly relates those objectives to the elements of a finding. For example, an audit objective may be to determine the current status or condition of program operations or progress in implementing legislative requirements, and not the related cause or effect. In this situation, developing the condition would address the audit objective, and developing the other elements of a finding would not be necessary.
- **8.129** The cause of a finding may relate to an underlying internal control deficiency. For example, auditors conducting a compliance audit may find that an audited entity has not complied with certain legislation. Upon further evaluation, the auditors may find the root cause of the finding to be that one of the entity's control activities was not properly designed. In this case, the finding would be an instance of noncompliance, but the cause of the finding would be an internal control deficiency.
- **8.130** Considering internal control in the context of a comprehensive internal control framework, such as *Standards for Internal Control in the Federal Government* or *Internal Control—Integrated Framework*, ⁷⁸ can help auditors to determine whether underlying internal control deficiencies exist as the root cause of findings. When the audit objectives include explaining why a particular type of positive or negative program performance, output, or outcome identified in the audit occurred, the underlying deficiencies are referred to as cause. Identifying the cause of

⁷⁸The COSO Framework and the Green Book provide suitable and available criteria against which management may evaluate and report on the effectiveness of the entity's internal control. The Green Book may be adopted by entities beyond those federal entities for which it is legally required, such as state, local, and quasi-governmental entities, as well as other federal entities and not-for-profit organizations, as a framework for an internal control system.

problems may assist auditors in making constructive recommendations for correction. Auditors may identify deficiencies in program design or structure as the cause of deficient performance. Auditors may also identify deficiencies in internal control that are significant to the subject matter of the performance audit as the cause of deficient performance. In developing these types of findings, the deficiencies in program design or internal control would be described as the cause. Often the causes of deficient program performance are complex and involve multiple factors, including fundamental, systemic root causes.

8.131 When the audit objectives include estimating the extent to which a program has caused changes in physical, social, or economic conditions, "effect" is a measure of the program's impact. In this case, effect is the extent to which positive or negative changes in actual physical, social, or economic conditions can be identified and attributed to the program.

Audit Documentation

Requirements: Audit Documentation

- **8.132** Auditors must prepare audit documentation related to planning, conducting, and reporting for each audit. Auditors should prepare audit documentation in sufficient detail to enable an experienced auditor, having no previous connection to the audit, to understand from the audit documentation the nature, timing, extent, and results of audit procedures performed; the evidence obtained; and its source and the conclusions reached, including evidence that supports the auditors' significant judgments and conclusions.
- **8.133** Auditors should prepare audit documentation that contains evidence that supports the findings, conclusions, and recommendations before they issue their report.
- **8.134** Auditors should design the form and content of audit documentation to meet the circumstances of the particular audit. The audit documentation constitutes the principal record of the work that the auditors have performed in accordance with standards and the conclusions that the auditors have reached. The quantity, type, and content of audit documentation are a matter of the auditors' professional judgment.

- **8.135** Auditors should document the following:
 - a. the objectives, scope, and methodology of the audit;
 - b. the work performed and evidence obtained to support significant judgments and conclusions, as well as expectations in analytical procedures, including descriptions of transactions and records examined (for example, by listing file numbers, case numbers, or other means of identifying specific documents examined, though copies of documents examined or detailed listings of information from those documents are not required); and
 - **c.** supervisory review, before the audit report is issued, of the evidence that supports the findings, conclusions, and recommendations contained in the audit report.
- **8.136** When auditors do not comply with applicable GAGAS requirements because of law, regulation, scope limitations, restrictions on access to records, or other issues affecting the audit, the auditors should document the departure from the GAGAS requirements and the impact on the audit and on the auditors' conclusions.

Application Guidance: Audit Documentation

- **8.137** Audit documentation is an essential element of audit quality. The process of preparing and reviewing audit documentation contributes to the quality of an audit. Audit documentation serves to (1) provide the principal support for the audit report, (2) aid auditors in conducting and supervising the audit, and (3) allow for the review of audit quality.
- **8.138** An experienced auditor means an individual (whether internal or external to the audit organization) who possesses the competencies and skills that would have enabled him or her to conduct the performance audit. These competencies and skills include an understanding of (1) the performance audit processes, (2) GAGAS and applicable legal and regulatory requirements, (3) the subject matter associated with achieving the audit objectives, and (4) issues related to the audited entity's environment.
- **8.139** When documenting departures from the GAGAS requirements, the audit documentation requirements apply to departures from unconditional

requirements and from presumptively mandatory requirements when alternative procedures performed in the circumstances were not sufficient to achieve the objectives of the requirements.

Availability of Individuals and Documentation

Requirement: Availability of Individuals and Documentation

8.140 Subject to applicable provisions of laws and regulations, auditors should make appropriate individuals and audit documentation available upon request and in a timely manner to other auditors or reviewers.

Application Guidance: Availability of Individuals and Documentation

8.141 Underlying GAGAS audits is the premise that audit organizations in federal, state, and local governments and public accounting firms engaged to conduct audits in accordance with GAGAS cooperate in auditing programs of common interest so that auditors may use others' work and avoid duplication of efforts. The use of auditors' work by other auditors may be facilitated by contractual arrangements for GAGAS audits that provide for full and timely access to appropriate individuals and to audit documentation.

Is internal control significant to audit objectives? Determine, as applicable, for new or revised Yes No objectives **Document and Document** proceed Obtain an understanding of internal control that is significant to the audit objectives Assess and document the assessment of internal control to the extent necessary to address the audit objectives Evaluate and document the significance of identified internal control deficiencies within the context of the

audit objectives

Consider internal control deficiencies when develop-

Identify in the audit report which internal control components and principles are significant

ing the cause element of findings

Figure 4: Consideration of Internal Control in a Generally Accepted Government Auditing Standards Performance Audit

Source: GAO. | GAO-18-568G

Chapter 9: Reporting Standards for Performance Audits

9.01 This chapter contains reporting requirements and guidance for performance audits conducted in accordance with generally accepted government auditing standards (GAGAS). Reporting requirements establish the auditors' overall approach for communicating the results of a performance audit. For performance audits conducted in accordance with GAGAS, the requirements and guidance in chapters 1 through 5 and chapter 8 also apply.

9.02 The reporting requirements for performance audits relate to reporting the auditors' compliance with GAGAS, the form of the report, the report contents, obtaining the views of responsible officials, report distribution, reporting confidential or sensitive information, and discovery of insufficient evidence after report release.

Reporting Auditors' Compliance with GAGAS

Requirements: Reporting Auditors' Compliance with GAGAS

9.03 When auditors comply with all applicable GAGAS requirements, they should use the following language, which represents an unmodified GAGAS compliance statement, in the audit report to indicate that they conducted the audit in accordance with GAGAS:

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

- **9.04** Audit organizations that meet the independence requirements for internal audit organizations, but not those for external audit organizations, should include in the GAGAS compliance statement, where applicable, a statement that they are independent per the GAGAS requirements for internal auditors.
- **9.05** When auditors do not comply with all applicable GAGAS requirements, they should include a modified GAGAS compliance statement in the audit report. For performance audits, auditors should use a statement that includes either (1) the language in paragraph

9.03, modified to indicate the requirements that were not followed, or (2) language indicating that the auditors did not follow GAGAS.

Report Format

Requirements: Report Format

- **9.06** Auditors should issue audit reports communicating the results of each completed performance audit.
- **9.07** Auditors should issue the audit report in a form that is appropriate for its intended use, either in writing or in some other retrievable form.⁷⁹

Application Guidance: Report Format

- **9.08** The purposes of audit reports are to (1) clearly communicate the results of audits to those charged with governance, the appropriate officials of the audited entity, and the appropriate oversight officials and (2) facilitate follow-up to determine whether appropriate corrective actions have been taken.
- **9.09** Auditors may present audit reports using electronic media through which report users and the audit organization can retrieve them. The users' needs will influence the form of the audit report. Different forms of audit reports include written reports, letters, briefing slides, or other presentation materials.

Report Content

Requirements: Report Content, Including Objectives, Scope, and Methodology

9.10 Auditors should prepare audit reports that contain (1) the objectives, scope, and methodology of the audit; (2) the audit results, including findings, conclusions, and recommendations, as appropriate;

⁷⁹See paras. 9.56 through 9.67 for a discussion of report distribution and reporting confidential or sensitive information.

- (3) a summary of the views of responsible officials; and (4) if applicable, the nature of any confidential or sensitive information omitted.
- **9.11** Auditors should communicate audit objectives in the audit report in a clear, specific, neutral, and unbiased manner that includes relevant assumptions. In order to avoid potential misunderstanding, when audit objectives are limited but users could infer broader objectives, auditors should state in the audit report that certain issues were outside the scope of the audit.
- **9.12** Auditors should describe the scope of the work performed and any limitations, including issues that would be relevant to likely users, so that report users can reasonably interpret the findings, conclusions, and recommendations in the report without being misled. Auditors should also report any significant constraints imposed on the audit approach by information limitations or scope impairments, including denials of, or excessive delays in, access to certain records or individuals.
- **9.13** In describing the work performed to address the audit objectives and support the reported findings and conclusions, auditors should, as applicable, explain the relationship between the population and the items tested; identify entities, geographic locations, and the period covered; report the kinds and sources of evidence; and explain any significant limitations or uncertainties based on the auditors' overall assessment of the sufficiency and appropriateness of the evidence in the aggregate.
- **9.14** In reporting audit methodology, auditors should explain how the completed audit work supports the audit objectives, including the evidence-gathering and evidence-analysis techniques, in sufficient detail to allow knowledgeable users of their reports to understand how the auditors addressed the audit objectives. Auditors should identify significant assumptions made in conducting the audit; describe comparative techniques applied; describe the criteria used; and, when the results of sample testing significantly support the auditors' findings, conclusions, or recommendations, describe the sample design and state why the design was chosen, including whether the results can be projected to the intended population.

Application Guidance: Report Content, Including Objectives, Scope, and Methodology

- **9.15** Report users need information regarding the audit objectives, scope, and methodology to understand the purpose of the audit; the nature and extent of the audit work performed; the context and perspective regarding what is reported; and any significant limitations in the audit objectives, scope, or methodology.
- **9.16** In reporting audit methodology, auditors may include a description of the procedures performed as part of their assessment of the sufficiency and appropriateness of information used as audit evidence.
- **9.17** The auditor may use the report quality elements of accurate, objective, complete, convincing, clear, concise, and timely when developing and writing the audit report as the subject permits.
 - **a.** Accurate: An accurate report is supported by sufficient. appropriate evidence with key facts, figures, and findings being traceable to the audit evidence. Reports that are fact-based, with a clear statement of sources, methods, and assumptions so that report users can judge how much weight to give the evidence reported, assist in achieving accuracy. Disclosing data limitations and other disclosures also contribute to producing more accurate audit reports. Reports also are more accurate when the findings are presented in the broader context of the issue. One way to help the audit organization prepare accurate audit reports is to use a quality control process such as referencing. Referencing is a process in which an experienced auditor who is independent of the audit checks that statements of facts, figures, and dates are correctly reported; the findings are adequately supported by the evidence in the audit documentation; and the conclusions and recommendations flow logically from the evidence.
 - b. Objective: Objective means that the presentation of the report is balanced in content and tone. A report's credibility is significantly enhanced when it presents evidence in an unbiased manner and in the proper context. This means presenting the audit results impartially and fairly. The tone of reports may encourage decision makers to act on the auditors' findings and recommendations. This balanced tone can be achieved when reports present sufficient, appropriate evidence to support conclusions while refraining from using adjectives or adverbs that characterize

evidence in a way that implies criticism or unsupported conclusions. The objectivity of audit reports is enhanced when the report explicitly states the source of the evidence and the assumptions used in the analysis. The report may recognize the positive aspects of the program reviewed if applicable to the audit objectives. Inclusion of positive program aspects may lead to improved performance by other government organizations that read the report. Audit reports are more objective when they demonstrate that the work has been performed by professional, unbiased, independent, and knowledgeable personnel.

- c. Complete: Being complete means that the report contains sufficient, appropriate evidence needed to satisfy the audit objectives and promote an understanding of the matters reported. It also means the report states evidence and findings without omission of significant relevant information related to the audit objectives. Providing report users with an understanding means providing perspective on the extent and significance of reported findings, such as the frequency of occurrence relative to the number of cases or transactions tested and the relationship of the findings to the entity's operations. Being complete also means clearly stating what was and was not done and explicitly describing data limitations, constraints imposed by restrictions on access to records, or other issues.
- d. Convincing: Being convincing means that the audit results are responsive to the audit objectives, that the findings are presented persuasively, and that the conclusions and recommendations flow logically from the facts presented. The validity of the findings, the reasonableness of the conclusions, and the benefit of implementing the recommendations are more convincing when supported by sufficient, appropriate evidence. Reports designed in this way can help focus the attention of responsible officials on the matters that warrant attention and can provide an incentive for taking corrective action.
- e. Clear: Clarity means the report is easy for the intended user to read and understand. Preparing the report in language as clear and simple as the subject permits assists auditors in achieving this goal. Use of straightforward, nontechnical language is helpful to simplify presentation. Defining technical terms, abbreviations, and acronyms that are used in the report is also helpful. Auditors may use a highlights page or summary within the report to capture the

report user's attention and highlight the overall message. If a summary is used, it is helpful if it focuses on the audit objectives, summarizes the audit's most significant findings and the report's principal conclusions, and prepares users to anticipate the major recommendations. Logical organization of material and accuracy and precision in stating facts and in drawing conclusions assist in the report's clarity and understandability. Effective use of titles and captions and topic sentences makes the report easier to read and understand. Visual aids (such as pictures, charts, graphs, and maps) may help clarify and summarize complex material.

- f. Concise: Being concise means that the report is no longer than necessary to convey and support the message. Extraneous detail detracts from a report and may even conceal the real message and confuse or distract the users. Although room exists for considerable judgment in determining the content of reports, those that are fact-based but concise are likely to achieve results.
- g. Timely: To be of maximum use, providing relevant evidence in time to respond to officials of the audited entity, legislative officials, and other users' legitimate needs is the auditors' goal. Likewise, the evidence provided in the report is more helpful if it is current. Therefore, the timely issuance of the report is an important reporting goal for auditors. During the audit, the auditors may provide interim reports of significant matters to appropriate entity and oversight officials. Such communication alerts officials to matters needing immediate attention and allows them to take corrective action before the final report is completed.

Reporting Findings, Conclusions, and Recommendations

Requirements: Reporting Findings, Conclusions, and Recommendations

- **9.18** In the audit report, auditors should present sufficient, appropriate evidence to support the findings and conclusions in relation to the audit objectives. Auditors should provide recommendations for corrective action if findings are significant within the context of the audit objectives.
- **9.19** Auditors should report conclusions based on the audit objectives and the audit findings.

- **9.20** Auditors should describe in their report limitations or uncertainties with the reliability or validity of evidence if (1) the evidence is significant to the findings and conclusions within the context of the audit objectives and (2) such disclosure is necessary to avoid misleading the report users about the findings and conclusions. Auditors should describe the limitations or uncertainties regarding evidence in conjunction with the findings and conclusions, in addition to describing those limitations or uncertainties as part of the objectives, scope, and methodology.
- **9.21** Auditors should place their findings in perspective by describing the nature and extent of the issues being reported and the extent of the work performed that resulted in the findings. To give the reader a basis for judging the prevalence and consequences of these findings, auditors should, as appropriate, relate the instances identified to the population or the number of cases examined and quantify the results in terms of dollar value or other measures. If the results cannot be projected, auditors should limit their conclusions appropriately.
- **9.22** When reporting on the results of their work, auditors should disclose significant facts relevant to the objectives of their work and known to them that if not disclosed could mislead knowledgeable users, misrepresent the results, or conceal significant improper or illegal practices.
- **9.23** When feasible, auditors should recommend actions to correct deficiencies and other findings identified during the audit and to improve programs and operations when the potential for improvement in programs, operations, and performance is substantiated by the reported findings and conclusions. Auditors should make recommendations that flow logically from the findings and conclusions, are directed at resolving the cause of identified deficiencies and findings, and clearly state the actions recommended.

Application Guidance: Reporting Findings, Conclusions, and Recommendations

9.24 The extent to which the elements for a finding are developed depends on the audit objectives. Clearly developed findings assist management and oversight officials of the audited entity in understanding the need for taking corrective action.

- **9.25** As discussed in paragraphs 8.108 through 8.115, even though the auditors may have some uncertainty about the sufficiency or appropriateness of some of the evidence, they may nonetheless determine that in total there is sufficient, appropriate evidence given the findings and conclusions. Describing limitations provides report users with a clear understanding of how much responsibility the auditors are taking for the information.
- **9.26** Auditors may provide background information to establish the context for the overall message and to help the reader understand the findings and significance of the issues discussed. Appropriate background information may include information on how programs and operations work; the significance of programs and operations (e.g., dollars, effect, purposes, and past audit work, if relevant); a description of the audited entity's responsibilities; and explanation of terms, organizational structure, and the statutory basis for the program and operations.
- **9.27** Report conclusions are logical inferences about the program based on the auditors' findings, not merely a summary of the findings. The strength of the auditors' conclusions depends on the persuasiveness of the evidence supporting the findings and the soundness of the logic used to formulate the conclusions. Conclusions are more compelling if they lead to recommendations and convince a knowledgeable user of the report that action is necessary.
- **9.28** Effective recommendations encourage improvements in the conduct of government programs and operations. Recommendations are effective when they are addressed to parties with the authority to act and when the recommended actions are specific, feasible, cost-effective, and measurable.

Reporting on Internal Control

Requirements: Reporting on Internal Control

9.29 When internal control is significant within the context of the audit objectives, auditors should include in the audit report (1) the scope of their work on internal control and (2) any deficiencies in internal control that are significant within the context of the audit objectives and based upon the audit work performed.

- **9.30** If some but not all internal control components are significant to the audit objectives, the auditors should identify as part of the scope those internal control components and underlying principles that are significant to the audit objectives.
- **9.31** When auditors detect deficiencies in internal control that are not significant to the objectives of the audit but warrant the attention of those charged with governance, they should include those deficiencies either in the report or communicate those deficiencies in writing to audited entity officials. If the written communication is separate from the audit report, auditors should refer to that written communication in the audit report.

Application Guidance: Reporting on Internal Control

- **9.32** Control components and underlying principles that are not considered significant to the audit objectives may be identified in the scope if, in the auditors' professional judgment, doing so is necessary to preclude a misunderstanding of the breadth of the conclusions of the audit report and to clarify that control effectiveness has not been evaluated as a whole. Auditors may also identify and describe the five components of internal control so that report users understand the scope of the work within the context of the entity's internal control system.
- **9.33** An internal control system is effective if the five components of internal control are effectively designed, implemented, and operating, and are operating together in an integrated manner. The principles support the effective design, implementation, and operation of the associated components and represent requirements necessary to establish an effective internal control system. If a principle is not applied effectively, then the respective component cannot be effective. If a principle or component is not effective, or the components are not operating together in an integrated manner, then an internal control system cannot be effective.
- **9.34** When auditors detect deficiencies in internal control that do not warrant the attention of those charged with governance, determining whether and how to communicate such deficiencies to audited entity officials is a matter of professional judgment.

Reporting on Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

Requirements: Reporting on Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

- **9.35** Auditors should report a matter as a finding when they conclude, based on sufficient, appropriate evidence, that noncompliance with provisions of laws, regulations, contracts, and grant agreements either has occurred or is likely to have occurred that is significant within the context of the audit objectives.
- **9.36** Auditors should communicate findings in writing to audited entity officials when the auditors detect instances of noncompliance with provisions of laws, regulations, contracts, and grant agreements that are not significant within the context of the audit objectives but warrant the attention of those charged with governance.

Application Guidance: Reporting on Noncompliance with Provisions of Laws, Regulations, Contracts, and Grant Agreements

- **9.37** Whether a particular act is, in fact, noncompliance with provisions of laws, regulations, contracts, and grant agreements may have to await final determination by a court of law or other adjudicative body.⁸⁰
- **9.38** When auditors detect instances of noncompliance with provisions of laws, regulations, contracts, and grant agreements that do not warrant the attention of those charged with governance, the auditors' determination of whether and how to communicate such instances to audited entity officials is a matter of professional judgment.
- **9.39** When noncompliance with provisions of laws, regulations, contracts, and grant agreements either has occurred or is likely to have occurred, auditors may consult with authorities or legal counsel about whether publicly reporting such information would compromise investigative or legal proceedings. Auditors may limit their public reporting to matters that would not compromise those proceedings and, for example, report only on information that is already a part of the public record.

 $^{^{80}}$ See paras. 8.27 through 8.29 for a discussion of investigations or legal proceedings.

Reporting on Instances of Fraud

Requirements: Reporting on Instances of Fraud

- **9.40** Auditors should report a matter as a finding when they conclude, based on sufficient, appropriate evidence, that fraud either has occurred or is likely to have occurred that is significant to the audit objectives.
- **9.41** Auditors should communicate findings in writing to audited entity officials when the auditors detect instances of fraud that are not significant within the context of the audit objectives but warrant the attention of those charged with governance.

Application Guidance: Reporting on Instances of Fraud

- **9.42** Whether a particular act is, in fact, fraud may have to await final determination by a court of law or other adjudicative body.⁸¹
- **9.43** When auditors detect instances of fraud that do not warrant the attention of those charged with governance, the auditors' determination of whether and how to communicate such instances to audited entity officials is a matter of professional judgment.
- **9.44** When auditors conclude fraud has occurred or is likely to have occurred, auditors may consult with authorities or legal counsel about whether publicly reporting such information would compromise investigative or legal proceedings. Auditors may limit their public reporting to matters that would not compromise those proceedings and, for example, report only on information that is already a part of the public record.

Reporting Findings Directly to Parties outside the Audited Entity

Requirements: Reporting Findings Directly to Parties outside the Audited Entity

9.45 Auditors should report known or likely noncompliance with provisions of laws, regulations, contracts, and grant agreements or fraud directly to parties outside the audited entity in the following two

⁸¹See paras. 8.27 through 8.29 for a discussion of investigations or legal proceedings.

circumstances.

- a. When audited entity management fails to satisfy legal or regulatory requirements to report such information to external parties specified in law or regulation, auditors should first communicate the failure to report such information to those charged with governance. If the audited entity still does not report this information to the specified external parties as soon as practicable after the auditors' communication with those charged with governance, then the auditors should report the information directly to the specified external parties.
- b. When audited entity management fails to take timely and appropriate steps to respond to noncompliance with provisions of laws, regulations, contracts, and grant agreements or instances of fraud that (1) are likely to have a significant effect on the subject matter and (2) involve funding received directly or indirectly from a government agency, auditors should first report management's failure to take timely and appropriate steps to those charged with governance. If the audited entity still does not take timely and appropriate steps as soon as practicable after the auditors' communication with those charged with governance, then the auditors should report the audited entity's failure to take timely and appropriate steps directly to the funding agency.
- **9.46** Auditors should comply with the requirements in paragraph 9.45 even if they have resigned or been dismissed from the audit prior to its completion.
- **9.47** Auditors should obtain sufficient, appropriate evidence, such as confirmation from outside parties, to corroborate representations by audited entity management that it has reported audit findings in accordance with provisions of laws, regulations, or funding agreements. When auditors are unable to do so, they should report such information directly, as discussed in paragraphs 9.45 and 9.46.

Application Guidance: Reporting Findings Directly to Parties outside the Audited Entity

- **9.48** The reporting in paragraph 9.45 is in addition to any legal requirements to report such information directly to parties outside the audited entity.
- **9.49** Internal audit organizations do not have a duty to report outside the audited entity unless required by law, regulation, or policy.

Obtaining the Views of Responsible Officials

Requirements: Obtaining the Views of Responsible Officials

- **9.50** Auditors should obtain and report the views of responsible officials of the audited entity concerning the findings, conclusions, and recommendations in the audit report, as well as any planned corrective actions.
- **9.51** When auditors receive written comments from the responsible officials, they should include in their report a copy of the officials' written comments or a summary of the comments received. When the responsible officials provide oral comments only, auditors should prepare a summary of the oral comments, provide a copy of the summary to the responsible officials to verify that the comments are accurately represented, and include the summary in their report.
- **9.52** When the audited entity's comments are inconsistent or in conflict with the findings, conclusions, or recommendations in the draft report, the auditors should evaluate the validity of the audited entity's comments. If the auditors disagree with the comments, they should explain in the report their reasons for disagreement. Conversely, the auditors should modify their report as necessary if they find the comments valid and supported by sufficient, appropriate evidence.
- **9.53** If the audited entity refuses to provide comments or is unable to provide comments within a reasonable period of time, the auditors may issue the report without receiving comments from the audited entity. In such cases, the auditors should indicate in the report that the audited entity did not provide comments.

Application Guidance: Obtaining the Views of Responsible Officials

- **9.54** Providing a draft report with findings for review and comment by responsible officials of the audited entity and others helps the auditors develop a report that is fair, complete, and objective. Including the views of responsible officials results in a report that presents not only the auditors' findings, conclusions, and recommendations, but also the perspectives of the audited entity's responsible officials and the corrective actions they plan to take. Obtaining the comments in writing is preferred, but oral comments are acceptable. In cases in which the audited entity provides technical comments in addition to its written or oral comments on the report, auditors may disclose in the report that such comments were received. Technical comments address points of fact or are editorial in nature and do not address substantive issues, such as methodology, findings, conclusions, or recommendations.
- **9.55** Obtaining oral comments may be appropriate when, for example, there is a reporting date critical to meeting a user's needs; auditors have worked closely with the responsible officials throughout the engagement, and the parties are familiar with the findings and issues addressed in the draft report; or the auditors do not expect major disagreements with findings, conclusions, or recommendations in the draft report, or major controversies with regard to the issues discussed in the draft report.

Report Distribution

Requirements: Report Distribution

9.56 Distribution of reports completed in accordance with GAGAS depends on the auditors' relationship with the audited organization and the nature of the information contained in the reports. Auditors should document any limitation on report distribution. Auditors should make audit reports available to the public, unless distribution is specifically limited by the terms of the engagement, law, or regulation.

Report Distribution for Internal Auditors

9.57 If an internal audit organization in a government entity follows the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing* as well as GAGAS, the head of the internal audit organization should communicate results to the parties who can ensure that the results are given due consideration. If not otherwise mandated by statutory or regulatory requirements, prior

to releasing results to parties outside the organization, the head of the internal audit organization should (1) assess the potential risk to the organization, (2) consult with senior management or legal counsel as appropriate, and (3) control dissemination by indicating the intended users in the report.

Report Distribution for External Auditors

- **9.58** An audit organization in a government entity should distribute audit reports to those charged with governance, to the appropriate audited entity officials, and to the appropriate oversight bodies or organizations requiring or arranging for the audits. As appropriate, auditors should also distribute copies of the reports to other officials who have legal oversight authority or who may be responsible for acting on audit findings and recommendations and to others authorized to receive such reports.
- **9.59** A public accounting firm contracted to conduct an audit in accordance with GAGAS should clarify report distribution responsibilities with the engaging party. If the contracting firm is responsible for the distribution, it should reach agreement with the party contracting for the audit about which officials or organizations will receive the report and the steps being taken to make the report available to the public.

Application Guidance: Report Distribution for External Auditors

9.60 Making an audit report available to the public can involve auditors posting the audit report to their publicly accessible websites or verifying that the audited entity has posted the audit report to its publicly accessible website.

Reporting Confidential or Sensitive Information

Requirements: Reporting Confidential or Sensitive Information

9.61 If certain information is prohibited from public disclosure or is excluded from a report because of its confidential or sensitive nature, auditors should disclose in the report that certain information has been omitted and the circumstances that make the omission necessary.

- **9.62** When circumstances call for omission of certain information, auditors should evaluate whether this omission could distort the audit results or conceal improper or illegal practices and revise the report language as necessary to avoid report users drawing inappropriate conclusions from the information presented.
- **9.63** When the audit organization is subject to public records laws, auditors should determine whether public records laws could affect the availability of classified or limited use reports and determine whether other means of communicating with management and those charged with governance would be more appropriate. Auditors use judgment to determine the appropriate means to communicate the omitted information to management and those charged with governance considering, among other things, whether public records laws could affect the availability of classified or limited use reports.

Application Guidance: Reporting Confidential or Sensitive Information

- **9.64** If the report refers to the omitted information, the reference may be general and not specific. If the omitted information is not necessary to meet the audit objectives, the report need not refer to its omission.
- **9.65** Certain information may be classified or may otherwise be prohibited from general disclosure by federal, state, or local laws or regulations. In such circumstances, auditors may issue a separate, classified, or limited use report containing such information and distribute the report only to persons authorized by law or regulation to receive it.
- **9.66** Additional circumstances associated with public safety, privacy, or security concerns could justify the exclusion of certain information from a publicly available or widely distributed report. For example, detailed information related to computer security for a particular program may be excluded from publicly available reports because of the potential damage that misuse of this information could cause. In such circumstances, auditors may issue a limited use report containing such information and distribute the report only to those parties responsible for acting on the auditors' recommendations. In some instances, it may be appropriate to issue both a publicly available report with the sensitive information excluded and a limited use report. The auditors may consult with legal counsel regarding any requirements or other circumstances that may necessitate omitting certain information. Considering the broad public

Chapter 9: Reporting Standards for Performance Audits

interest in the program or activity under audit assists auditors when deciding whether to exclude certain information from publicly available reports.

9.67 In cases described in paragraph 9.63, auditors may communicate general information in a written report and communicate detailed information orally. Auditors may consult with legal counsel regarding applicable public records laws.

Discovery of Insufficient Evidence after Report Release

Requirement: Discovery of Insufficient Evidence after Report Release

9.68 If, after the report is issued, the auditors discover that they did not have sufficient, appropriate evidence to support the reported findings or conclusions, they should communicate in the same manner as that used to originally distribute the report to those charged with governance, the appropriate officials of the audited entity, the appropriate officials of the entities requiring or arranging for the audits, and other known users, so that they do not continue to rely on the findings or conclusions that were not supported. If the report was previously posted to the auditors' publicly accessible website, the auditors should remove the report and post a public notification that the report was removed. The auditors should then determine whether to perform the additional audit work necessary to either reissue the report, including any revised findings or conclusions, or repost the original report if the additional audit work does not result in a change in findings or conclusions.

The following terms are provided to assist in clarifying the *Government Auditing Standards*. The most relevant paragraph numbers are provided for reference. When terminology differs from that used at an organization subject to generally accepted government auditing standards (GAGAS), auditors use professional judgment to determine if there is an equivalent term.

Abuse: Behavior that is deficient or improper when compared with behavior that a prudent person would consider reasonable and necessary business practice given the facts and circumstances, but excludes fraud and noncompliance with provisions of laws, regulations, contracts, and grant agreements. (paragraphs 6.23, 7.25, and 8.122)

Agreed-upon procedures engagement: Consists of auditors performing specific procedures on subject matter or an assertion and reporting findings without providing an opinion or a conclusion on it. (paragraph 1.18c)

Appropriateness: The measure of the quality of evidence that encompasses the relevance, validity, and reliability of evidence used for addressing the audit objectives and supporting findings and conclusions. (paragraph 8.102)

Attestation engagement: An examination, review, or agreed-upon procedures engagement conducted under the GAGAS attestation standards related to subject matter or an assertion that is the responsibility of another party. (paragraph 1.27a)

Audit: Either a financial audit or performance audit conducted in accordance with GAGAS. (paragraph 1.27b)

Audit objectives: What the audit is intended to accomplish. They identify the audit subject matter and performance aspects to be included. Audit objectives can be thought of as questions about the program that the auditors seek to answer based on evidence obtained and assessed against criteria. Audit objectives may also pertain to the current status or condition of a program. (paragraph 8.08)

Audit organization: A government audit entity or a public accounting firm or other audit entity that conducts GAGAS engagements. (paragraph 1.27c)

Audit procedures: The specific steps and tests auditors perform to address the audit objectives. (paragraph 8.11)

Audit report: A report issued as a result of a financial audit, attestation engagement, review of financial statements, or performance audit conducted in accordance with GAGAS. (paragraph 1.27d)

Audit risk: The possibility that the auditors' findings, conclusions, recommendations, or assurance may be improper or incomplete. The assessment of audit risk involves both qualitative and quantitative considerations. (paragraph 8.16)

Audited entity: The entity that is subject to a GAGAS engagement, whether that engagement is a financial audit, attestation engagement, review of financial statements, or performance audit. (paragraph 1.27e)

Auditor: An individual assigned to planning, directing, performing engagement procedures or reporting on GAGAS engagements (including work on audits, attestation engagements, and reviews of financial statements) regardless of job title. Therefore, individuals who may have the title auditor, information technology auditor, analyst, practitioner, evaluator, inspector, or other similar titles are considered auditors under GAGAS. (paragraph 1.27f)

Bias threat: The threat that an auditor will, as a result of political, ideological, social, or other convictions, take a position that is not objective. (paragraph 3.30c)

Cause: The factor or factors responsible for the difference between the condition and the criteria, which may also serve as a basis for recommendations for corrective actions. (paragraphs 6.27, 7.29, and 8.126)

Competence: The knowledge, skills, and abilities, obtained from education and experience, necessary to conduct the GAGAS engagement. Competence enables auditors to make sound professional judgments. Competence includes possessing the technical knowledge and skills necessary for the assigned role and the type of work being done. This includes possessing specific knowledge about GAGAS. (paragraph 4.05)

Condition: A situation that exists. The condition is determined and documented during the engagement. (paragraphs 6.26, 7.28, and 8.125)

Control objective: The aim or purpose of specified controls; control objectives address the risks related to achieving an entity's objectives. (paragraph 1.27g)

CPE programs: Structured educational activities or programs with learning objectives designed to maintain or enhance the auditors' competence to address engagement objectives and perform work in accordance with GAGAS. (paragraph 4.32)

Criteria: Laws, regulations, contracts, grant agreements, standards, measures, expected performance, defined business practices, and benchmarks against which performance is compared or evaluated. Criteria identify the required or desired state or expectation with respect to the program or operation. Criteria provide a context for evaluating evidence and understanding the findings, conclusions, and recommendations in the report. (paragraphs 6.25, 7.27, and 8.124)

Directing: Supervising the efforts of others who are involved in accomplishing the objectives of the engagement or reviewing engagement work to determine whether those objectives have been accomplished. (paragraph 4.11b)

Education: A structured and systematic process aimed at developing knowledge, skills, and other abilities; it is a process that is typically but not exclusively conducted in academic or learning environments. (paragraph 4.06)

Effect or potential effect: The outcome or consequence resulting from the difference between the condition and the criteria. (paragraphs 6.28, 7.30, and 8.127)

Engagement: A financial audit, attestation engagement, review of financial statements, or performance audit conducted in accordance with GAGAS. (paragraph 1.27h)

Engagement partner or director: The partner or director assigned responsibility for a specific engagement as designated by the audit organization. (paragraph 5.37)

Engagement team (or audit team): Auditors assigned to planning, directing, performing engagement procedures or reporting on GAGAS engagements. (paragraph 1.27i)

Engaging party: The party that engages the auditor to conduct a GAGAS engagement. (paragraph 1.27j)

Entity objective: What an entity wants to achieve; entity objectives are intended to meet the entity's mission, strategic plan, and goals and the requirements of applicable laws and regulations. (paragraph 1.27k)

Examination: Consists of obtaining reasonable assurance by obtaining sufficient, appropriate evidence about the measurement or evaluation of subject matter against criteria in order to be able to draw reasonable conclusions on which to base the auditor's opinion about whether the subject matter is in accordance with (or based on) the criteria or the assertion is fairly stated, in all material respects. (paragraph 1.18a)

Experience: Workplace activities that are relevant to developing professional proficiency. (paragraph 4.06)

External audit organization: An audit organization that issues reports to third parties external to the audited entity, either exclusively or in addition to issuing reports to senior management and those charged with governance of the audited entity. (paragraph 1.27I)

Familiarity threat: The threat that aspects of a relationship with management or personnel of an audited entity, such as a close or long relationship, or that of an immediate or close family member, will lead an auditor to take a position that is not objective. (paragraph 3.30d)

Financial audits: Provide an independent assessment of whether an entity's reported financial information (e.g., financial condition, results, and use of resources) is presented fairly, in all material respects, in accordance with recognized criteria. (paragraph 1.17)

Finding: An issue that may involve a deficiency in internal control; noncompliance with provisions of laws, regulations, contracts, or grant agreements; or instances of fraud. Elements of a finding generally include criteria, condition, cause, and effect or potential effect. (paragraphs 6.17, 6.19, 7.19, 7.21, 8.116, and 8.118)

Fraud: Involves obtaining something of value through willful misrepresentation. Whether an act is, in fact, fraud is determined through the judicial or other adjudicative system and is beyond auditors' professional responsibility. (paragraph 8.73)

Independence in appearance: The absence of circumstances that would cause a reasonable and informed third party to reasonably conclude that the integrity, objectivity, or professional skepticism of an audit organization or member of the engagement team had been compromised. (paragraph 3.21b)

Independence of mind: The state of mind that permits the conduct of an engagement without being affected by influences that compromise professional judgment, thereby allowing an individual to act with integrity and exercise objectivity and professional skepticism. (paragraph 3.21a)

Inputs: The amount of resources (in terms of, for example, money, material, or personnel) that is put into a program. These resources may come from within or outside the entity operating the program. Measures of inputs can have a number of dimensions, such as cost, timing, and quality. (paragraph 8.38d)

Integrity: Auditors performing their work with an attitude that is objective, fact-based, nonpartisan, and nonideological with regard to audited entities and users of the audit reports and making decisions consistent with the public interest of the program or activity under audit. (paragraphs 3.09 and 3.10)

Internal audit organization: An audit organization that is accountable to senior management and those charged with governance of the audited entity and that does not generally issue reports to third parties external to the audited entity. (paragraph 1.27m)

Internal control: A process effected by an entity's oversight body, management, and other personnel that provides reasonable assurance that the objectives of an entity will be achieved. (paragraph 1.22b)

Likelihood of occurrence: The possibility of a deficiency impacting an entity's ability to achieve its objectives. (paragraph 8.56b)

Magnitude of impact: The likely effect that a deficiency could have on the entity achieving its objectives. (paragraph 8.56a)

Management participation threat: The threat that results from an auditor's taking on the role of management or otherwise performing management functions on behalf of the audited entity, which will lead an auditor to take a position that is not objective. (paragraph 3.30f)

Methodology: The nature and extent of audit procedures for gathering and analyzing evidence to address the audit objectives. (paragraph 8.11)

Monitoring of quality: A process comprising an ongoing consideration and evaluation of the audit organization's system of quality control. (paragraph 5.47)

Nature of the deficiency: Involves factors such as the degree of subjectivity involved with the deficiency and whether the deficiency arises from fraud or misconduct. (paragraph 8.56c)

Nonsupervisory auditor: An auditor who plans or performs engagement procedures and whose work situation is characterized by low levels of ambiguity, complexity, and uncertainty. (paragraph 4.10a)

Objectivity: The basis for the credibility of auditing in the government sector. Objectivity includes independence of mind and appearance when conducting engagements, maintaining an attitude of impartiality, having intellectual honesty, and being free of conflicts of interest. (paragraph 3.11)

Outcomes: Accomplishments or results of a program. (paragraph 8.38g)

Outputs: The quantity of goods or services produced by a program. (paragraph 8.38f)

Partners and directors: Auditors who plan engagements, perform engagement procedures, or direct or report on engagements and whose work situations are characterized by high levels of ambiguity, complexity, and uncertainty. Partners and directors may also be responsible for reviewing engagement quality prior to issuing the report, for signing the report, or both. (paragraph 4.10c)

Peer review risk: the risk that the review team (1) fails to identify significant weaknesses in the reviewed audit organization's system of quality control for its auditing practice, its lack of compliance with that system, or a combination thereof; (2) issues an inappropriate opinion on the reviewed audit organization's system of quality control for its auditing practice, its compliance with that system, or a combination thereof; or (3) makes an inappropriate decision about the matters to be included in, or excluded from, the peer review report. (paragraph 5.68)

Performance audits: Engagements that provide objective analysis, findings, and conclusions to assist management and those charged with governance and oversight to, among other things, improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability. In a performance audit, the auditors measure or evaluate the subject matter of the audit and present the resulting information as part of, or accompanying, the audit report. (paragraphs 1.21 and 8.14)

Period of professional engagement: The period beginning when the auditors either sign an initial engagement letter or other agreement to conduct an engagement or begin to conduct an engagement, whichever is earlier. The period lasts for the duration of the professional relationship—which, for recurring engagements, could cover many periods—and ends with the formal or informal notification, either by the auditors or the audited entity, of the termination of the professional relationship or with the issuance of a report, whichever is later. (paragraph 3.23)

Performing engagement procedures: Performing tests and procedures necessary to accomplish the engagement objectives in accordance with GAGAS. (paragraph 4.11c)

Planning: Determining engagement objectives, scope, and methodology; establishing criteria to evaluate matters subject to audit; or coordinating the work of the other audit organization. This definition excludes auditors whose role is limited to gathering information used in planning the engagement. (paragraph 4.11a)

Presumptively mandatory requirements: Auditors and the audit organization must comply in all cases where such a requirement is relevant except in rare circumstances discussed in paragraphs 2.03, 2.04, and 2.08. GAGAS uses *should* to indicate a presumptively mandatory requirement. (paragraph 2.02b)

Professional behavior: Behavior that includes auditors avoiding any conduct that could bring discredit to their work and putting forth an honest effort in performing their duties in accordance with the relevant technical and professional standards. (paragraph 3.16)

Professional judgment: Use of the auditor's professional knowledge, skills, and abilities, in good faith and with integrity, to diligently gather

information and objectively evaluate the sufficiency and appropriateness of evidence. Professional judgment includes exercising reasonable care and professional skepticism. (paragraphs 3.109 through 3.117)

Program: Includes processes, projects, studies, policies, operations, activities, entities, and functions. (paragraph 8.08)

Program operations: The strategies, processes, and activities management uses to convert inputs into outputs. Program operations may be subject to internal control. (paragraph 8.38e)

Public interest: The collective well-being of the community of people and entities that the auditors serve. (paragraph 3.07)

Reasonable and informed third party: As evaluated by a hypothetical person, a person who possesses skills, knowledge, and experience to objectively evaluate the appropriateness of the auditor's judgments and conclusions. This evaluation entails weighing all the relevant facts and circumstances, including any safeguards applied, that the auditor knows, or could reasonably be expected to know, at the time that the evaluation is made. (paragraph 3.46)

Reporting: Determining the report content and substance or reviewing reports to determine whether the engagement objectives have been accomplished and the evidence supports the report's technical content and substance prior to issuance. This includes signing the report. (paragraph 4.11d)

Responsible party: The party responsible for a GAGAS engagement's subject matter. (paragraph 1.27n)

Review: Consists of obtaining limited assurance by obtaining sufficient, appropriate review evidence about the measurement or evaluation of subject matter against criteria in order to express a conclusion about whether any material modifications should be made to the subject matter in order for it to be in accordance with (or based on) the criteria or to the assertion in order for it to be fairly stated. Review-level work does not include reporting on internal control or compliance with provisions of laws, regulations, contracts, and grant agreements. (paragraph 1.18b)

Review of financial statements: The objective of the auditor when performing a review of financial statements is to obtain limited assurance as a basis for reporting whether the auditor is aware of any material

modifications that should be made to financial statements in order for the financial statements to be in accordance with the applicable financial reporting framework. A review of financial statements does not include obtaining an understanding of the entity's internal control, assessing fraud risk, or certain other procedures ordinarily performed in an audit. (paragraph 1.20)

Safeguards: Actions or other measures, individually or in combination, that auditors and the audit organization take that effectively eliminate threats to independence or reduce them to an acceptable level. (paragraph 3.49)

Scope: The boundary of the audit and is directly tied to the audit objectives. The scope defines the subject matter that the auditors will assess and report on, such as a particular program or aspect of a program, the necessary documents or records, the period of time reviewed, and the locations that will be included. (paragraph 8.10)

Self-interest threat: The threat that a financial or other interest will inappropriately influence an auditor's judgment or behavior. (paragraph 3.30a)

Self-review threat: The threat that an auditor or audit organization that has provided nonaudit services will not appropriately evaluate the results of previous judgments made or services provided as part of the nonaudit services when forming a judgment significant to a GAGAS engagement. (paragraph 3.30b)

Significance: The relative importance of a matter within the context in which it is being considered, including quantitative and qualitative factors. In the performance audit requirements, the term significant is comparable to the term material as used in the context of financial statement engagements. (paragraph 8.15)

Source documents: Documents providing evidence that transactions have occurred (for example, purchase orders, payroll time records, customer orders, and contracts). Such records also include an audited entity's general ledger and subsidiary records or equivalent. (paragraph 3.92)

Specialist: An individual or organization possessing special skill or knowledge in a particular field other than accounting or auditing that

assists auditors in conducting engagements. A specialist may be either an internal specialist or an external specialist. (paragraph 1.27p)

Structural threat: The threat that an audit organization's placement within a government entity, in combination with the structure of the government entity being audited, will affect the audit organization's ability to perform work and report results objectively. (paragraph 3.30g)

Sufficiency: A measure of the quantity of evidence used to support the findings and conclusions related to the audit objectives. (paragraph 8.99)

Supervisory auditor: An auditor who plans engagements, performs engagement procedures, or directs engagements, and whose work situation is characterized by moderate levels of ambiguity, complexity, and uncertainty. (paragraph 4.10b)

Technical comments: Comments that address points of fact or are editorial in nature and do not address substantive issues, such as methodology, findings, conclusions, or recommendations. (paragraphs 6.61, 7.59, and 9.54)

Those charged with governance: The individuals responsible for overseeing the strategic direction of the entity and obligations related to the accountability of the entity. This includes overseeing the financial reporting process, subject matter, or program under audit, including related internal controls. Those charged with governance may also be part of the entity's management. In some audited entities, multiple parties may be charged with governance, including oversight bodies, members or staff of legislative committees, boards of directors, audit committees, or parties contracting for the engagement. (paragraph 1.04)

Unconditional requirement: Requirement with which auditors and the audit organization must comply in all cases where such requirement is relevant. GAGAS uses *must* to indicate an unconditional requirement. (paragraph 2.02a)

Undue influence threat: The threat that influences or pressures from sources external to the audit organization will affect an auditor's ability to make objective judgments. (paragraph 3.30e)

Waste: The act of using or expending resources carelessly, extravagantly, or to no purpose. Waste can include activities that do not

Glossary
 include abuse and does not necessarily involve a violation of law.
(paragraphs 6.21, 7.23, and 8.120)

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Board of Trustees
Wallace D. Van Buren
President
Amy E. Sejnost
Vice President
Jeremy M. Wang
Clerk



General Manager Amy R. Underwood, P.E.

Legal Counsel
Daniel McCormick, P.C.

2710 Curtiss Street P.O. Box 1412 Downers Grove, IL 60515-0703 Phone: 630-969-0664 Fax: 630-969-0827 www.dgsd.org

Providing a Better Environment for South Central DuPage County

MEMORANDUM

To: Board of Trustees

From: Amy Underwood, General Manager

Date: July 14, 2023

Subject: Basin 2D Sewer Rehabilitation Contract Award

The District budgeted \$145,000 for the Basin 2D Sewer Rehabilitation project. (This is the first phase of the I/I removal efforts for the 2C-025 area that are being tracked monthly in the General Manager's Report to the Board.) Under this project, the 8" vitrified clay sewer pipe which was installed in 1928 under Carpenter St. in Downers Grove between Summit and Maple will be rehabilitated using cured in place pipe (CIPP).

In early spring, gasoline was discovered leaking into a section of the District's sewer on Ogden Ave. The District decided to add lining (i.e., CIPP) of that section of pipe and the one building service lateral connected to it to the Basin 2D project. This decision was made after the budget was approved.

Bids were opened for the Basin 2D Sewer Rehabilitation project on July 13, 2023. Baxter & Woodman (B&W) evaluated the bids and recommended that the District award the project to Visu-Sewer of Illinois, LLC, who was the lowest responsible and responsive bidder. Their bid was well under budget at \$61,270. The B&W recommendation letter and the bid tabulation are attached for your information.

Visu-Sewer was pre-qualified to bid and has previously performed work satisfactorily for the District.

At the July 18 Board meeting, I will request the Board award the Basin 2D Sewer Rehabilitation project to the lowest responsible and responsive bidder, Visu-Sewer of Illinois, LLC, in the amount of \$61,270 and for the General Manager and Assistant Clerk to sign the same.

C: BOLI, CS, DM

8678 Ridgefield Road, Crystal Lake, IL 60012 • 815.459.1260 • baxterwoodman.com

July 13, 2023

President and Board of Trustees Downers Grove Sanitary District 2710 Curtiss Street P.O. Box 1412 Downers Grove, Illinois 60515

Attention: Mrs. Amy R. Underwood, P.E., General Manager

RECOMMENDATION TO AWARD

Subject: Downers Grove Sanitary District – Basin 2D Sewer Rehabilitation

Dear President and Trustees:

The following bids were received for the Project on July 13, 2023:

<u>Bidder</u>	Amount of Bid
Visu-Sewer of Illinois, LLC Bridgeview, IL	\$61,270.00
Hoerr Construction, Inc Goodfield, IL	\$103,790.00

Our pre-bid opinion of probable cost for this Project was \$110,000. We have analyzed each of the bids and find Visu-Sewer of Illinois, LLC to be the lowest, responsible and responsive Bidder.

Based upon our familiarity and past working relationships with this Bidder, we believe that Visu-Sewer of Illinois, LLC is qualified to complete the Project.

We recommend the award of the Contract to Visu-Sewer of Illinois, LLC in the amount of \$61,270.00.

Please advise me of your decision.

Sincerely,

BAXTER & WOODMAN, INC. CONSULTING ENGINEERS

Shome M. Finschin

Shane M. Firsching, PE

P:\DGSD1\230401-Basin 2D CIPP\40-Design\12-Bidding\AwardRecommendation.docx

Downers Grove Sanitary District Basin 2D Sewer Rehabilitation

July 13, 2023 @ 10:00 AM Engineer's Job No. 0230401.40				Engineer's Estimate		Visu-	Sewer	Hoerr Construction	
No.	ltem	Quantity	Unit	Unit Price	Total Cost	Unit Price Total Cost		Unit Price	Total Cost
1	MOBILIZATION	1	LSUM	\$ 10,000.00	\$ 10,000.00	\$ 3,500.00	\$ 3,500.00	\$ 16,000.00	\$ 16,000.00
2	SANITARY SEWER LIGHT CLEANING AND TELEVISING*	1	LSUM	\$ 17,375.00	\$ 17,375.00	\$ 3,475.00	\$ 3,475.00	\$ 7,500.00	\$ 7,500.00
3	SANITARY SEWER BUILDING SERVICES LIGHT CLEANING AND TELEVISING	1	EACH	\$ 1,000.00	\$ 1,000.00	\$ 1,650.00	\$ 1,650.00	\$ 3,000.00	\$ 3,000.00
4	ROOT REMOVAL	8	HOUR	\$ 400.00	\$ 3,200.00	\$ 390.00	\$ 3,120.00	\$ 10.00	\$ 80.00
5	CURED-IN-PLACE PIPE (MH TO MH)								
	8-inch, 8-12 ft. depth	541	LIN. FT.	\$ 70.00	\$ 37,870.00	\$ 40.00	\$ 21,640.00	\$ 48.00	\$ 25,968.00
	8-inch, 12-16 ft. depth	154	LIN. FT.	\$ 65.00	\$ 10,010.00	\$ 40.00	\$ 6,160.00	\$ 48.00	\$ 7,392.00
6	END SEAL	9	EACH	\$ 100.00	\$ 900.00	\$ 135.00	\$ 1,215.00	\$ 200.00	\$ 1,800.00
7	CIPP SAMPLE TESTING	2	EACH	\$ 1,500.00	\$ 3,000.00	\$ 150.00	\$ 300.00	\$ 200.00	\$ 400.00
8	SERVICE LATERAL REINSTATEMENT	14	EACH	\$ 250.00	\$ 3,500.00	\$ 50.00	\$ 700.00	\$ 125.00	\$ 1,750.00
9	CURED-IN-PLACE PIPE (BUILDING SERVICE LATERAL)	1	EACH	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 20,000.00	\$ 20,000.00
10	ADDITIONAL CURED-IN-PLACE PIPE (BUILDING SERVICE LATERAL)	40	LIN. FT.	\$ 45.00	\$ 1,800.00	\$ 68.00	\$ 2,720.00	\$ 80.00	\$ 3,200.00
11	SEALING OF LATERAL CONNECTIONS	14	EACH	\$ 350.00	\$ 4,900.00	\$ 485.00	\$ 6,790.00	\$ 1,050.00	\$ 14,700.00
12	TRAFFIC CONTROL AND PROTECTION	1	LSUM	\$ 7,945.00	\$ 7,945.00	\$ 1,500.00	\$ 1,500.00	\$ 2,000.00	\$ 2,000.00
				Total	\$ 110,000.00	Total	\$ 61,270.00	Total	\$ 103,790.00

As-Read \$

110,000.00

Bid Bond 10% Bid Bond 10%

As-Read \$

61,270.00

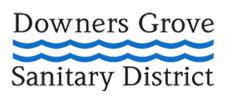
As-Read \$

Bid Bond 10%

103,790.00

^{*}Note: M&P describes this item as paid per LF. Bid form shows quantity of 695 LF, but "Lump Sum" in the space for the unit price. All bidders seemed to enter the lump sum price for performing light cleaning and televising on 695 LF of sewer.

Board of Trustees Wallace D. Van Buren President Amy E. Sejnost Vice President Jeremy M. Wang Clerk



Amy R. Underwood, P.E. **Legal Counsel**

General Manager

Daniel McCormick, P.C.

2710 Curtiss Street P.O. Box 1412 Downers Grove, IL 60515-0703 Phone: 630-969-0664 Fax: 630-969-0827 www.dgsd.org

Providing a Better Environment for South Central DuPage County

MEMORANDUM

To: Board of Trustees

From: Amy R. Underwood, General Manager

Date: July 14, 2023

Subject: Renewable Energy Credits Purchase and Sale Agreement for Reporting Year 2023-24

The District's current agreement with Blue Delta Energy, LLC for the purchase of Renewable Energy Credits (RECs) ended May 31, 2023. For Reporting Year 2023-24, Blue Delta Energy is offering \$30.00/REC. This is a 24% increase over the previous year's rate. Staff recommends continuing to sell RECs through Blue Delta Energy for the next reporting year. The terms and conditions of the agreement will remain the same as the recently expired agreement.

At the July 18 Board meeting, I will be seeking approval from the Board to enter into the Renewable Energy Credits Purchase and Sale Agreement with Blue Delta Energy, LLC with for Reporting Year 2023-24 at a rate of \$30.00/REC and for permission for the General Manager to sign the same.

C: BOLI, DM, CS

DOWNERS GROVE SANITARY DISTRICT

MEMO

TO: Board of Trustees

FROM: Carly Shaw

Administrative Supervisor

DATE: July 7, 2023

RE: Administrative Services Progress Report – June 2023

ADMINISTRATIVE

Personnel

We are still seeking to fill the full-time position of Sewer System Engineering Technician. We do have an interview scheduled for July 17. I am going to investigate other avenues of listing this position and have cancelled the Zip Recruiter listing.

Administration Center Remodeling Project

YAD continues to complete the electrical work for the HVAC and has been given a list of items for correction from the architect. We seem to be nearing completion of construction, at which point the focus will be on furnishing and decorating the spaces. Carpet for the Administration Center office space was ordered and should arrive soon.

Reimbursement Program for Sanitary Sewer Backups Caused by Public Sanitary Sewer Blockages

There have been no new claims therefore there is no summary included.

Technology Update

The conversion from copper phone lines is almost complete. The rain gauge and elevator lines have been moved to a cellular solution and are completed. SCADA is still in the testing phase and once completed those copper phone lines will be disconnected.

The billing portal will launch on July 24th and testing of the file transfers has been successful. We are now looking at testing the registration for online access and payments to ensure it functions properly before the launch date. Emails will be sent to all paperless customers on Invoice Cloud informing them to register with City Insight prior to the July billing date otherwise customers will receive the post card bills. It is the plan to continue to send the updated summary of the portal use under City Insight as we do for Invoice Cloud below.

The following is a detailed summary of the Invoice Cloud portal's utilization in the last month and since the portal's launch in February 2015 through the end of last month.

# of Customers registered in the last month:	89
# of Customers paying their bills online in the last month:	2,120

Amount of Money processed through the Portal in the last month:	\$142,818.47
# of Customers signing up for Autopay through the Portal in the last month:	72
# of Customers enrolled in paperless billing in the last month:	55
# of customers registered for pay by text in the last month:	28
Cost to District for providing Invoice Cloud service in the last month:	\$697.20
Cost to District's customers (convenience fees) in the last month:	\$3,474.66
Estimated Monthly savings from customers enrolled in paperless billing:	\$147.72
# of Customers registered from launch through last month:	8,255
# of Customers signing up for Autopay through the Portal from launch through last month:	3,925
# of Customers enrolled in paperless billing from launch through last month:	4,924
# of customers registered for pay by text from launch through last month:	2,559

FINANCIAL

Treasurer's Report and Investment Activity

The monthly Treasurer's Report is included separately in the packet each month and detailed investment information (financial institution name, current rate and dollar amount) is provided on the District's Investment Schedule also provided separately in the packet each month.

Something to note regarding investments is that the Districts Money Market account at Bank Financial was converted to a new Money Market account earning 5% currently. There is potential for this rate to fluctuate throughout the year, but it will not go below 4%. This is good through December 31, 2023.

We are currently in the process of closing the Axos Bank and the Luana Savings money market accounts as these banks are not local to us. Those funds will be transferred into the IL Funds account or used to open a CD or CDARS account with better interest at a local banking institution. We will also be converting the Lisle Savings Bank money market into a CD with a much higher interest rate. These changes are anticipated to take place in July.

Annual Audit

Lauterbach & Amen have provided the Draft Audit for FYE 2023. I am in the process of reviewing the data and plan on having this ready for presentation at the August Board meeting.

User Billing

Detailed billing information is attached to this report.

cc: WDVB, AES, JMW, KJR, RTJ, MJS, DM

USER BILLING SUMMARY

User Charge System

Billings for June 2023 were as follows:

User	\$329,286.86
Surcharge	39,211.39
Monthly fees	409,549.14
Total	\$778,047.39
Summer Usage Adjustment	\$3,583.06
Billable Flow	144,757,244
Budgeted Billable Flow	142,355,292
% Actual/Budgeted Billable Flow	101.69%
YTD Billable Flow	403,150,255
YTD Budgeted Billable Flow	409,189,210
% Actual/Budgeted Billable Flow	98.52%

The user accounts receivable balance on 6/30/2023 is \$760,503.39 and consists of:

Current charges due 7/14/2023	\$630,540.25
Past due charges and penalty	129,963.14
Total	\$760,503.39

The past due charges represent:

Age	<u>User Charges</u>	<u>Penalty</u>	<u>Totals</u>
30 days past due	\$44,637.64	\$5,894.83	\$50,532.47
60 days past due	19,652.13	2,830.93	22,483.06
90 days & greater past due	48,202.48	8,745.13	56,947.61
Totals	\$112,492.25	\$17,470.89	\$129,963.14

Summary of Past Due Charges (90 Days and Over)

Five Year Comparison

<u>June</u>

<u>Year</u>	<u>User Charges</u>	<u>Penalty</u>	<u>Total</u>
2023	\$48,202.48	\$8,745.13	\$56,947.61
2022	35,801.73	7,550.71	43,352.44
2021	83,697.16	13,417.21	97,114.37 *
2020	85,214.22	1,419.54	86,633.76 *
2019	44,335.90	5,529.97	49,865.87 **

^{*}Includes \$10,462.28 in sewer disconnection costs on 2 accounts plus late fees

Twelve Months Ending June 2023

<u>Month</u>	<u>User Charges</u>	<u>Penalty</u>	<u>Total</u>
6/30/23	\$48,202.48	\$8,745.13	\$56,947.61
5/31/23	62,672.35	11,351.97	74,024.32
4/30/23	43,089.56	8,905.52	51,995.08
3/31/23	44,200.55	8,970.57	53,171.12
2/28/23	43,221.84	7,436.11	50,657.95
1/31/23	40,007.16	6,499.14	46,506.30
12/30/22	38,839.46	7,034.95	45,874.41
11/30/22	38,280.18	7,297.03	45,577.21
10/31/22	35,087.27	6,856.09	41,943.36
9/30/22	41,581.27	8,469.98	50,051.25
8/31/22	38,182.42	7,914.98	46,097.40
7/31/22	38,067.35	8,003.01	46,070.36

There were 34 accounts scheduled for Pre-Enforcement on June 15, 2023 of which 22 have paid in full. There are 17 accounts scheduled for Pre-Enforcement for July 14, 2023. Water shut off did not happen for June due to the issues with Downers Grove Billing compatibility with our billing software. We are trying to get something scheduled for early August 2023.

^{**}Includes \$13,020.74 I sewer disconnection costs on 4 accounts plus late fees

To: Amy Underwood, General Manager

From: Marc Majewski, Operations Supervisor

Re: Month of June 2023, WWTC Operations Report.

Date: July 11, 2023

Attached please find detailed operating data and our monthly report to Illinois EPA for June. We had no excursions over our permit limits in the month of June.

Certain highlights of operational activities included:

- Monthly flow: Average daily flows to the plant were 7.24 MGD. Total precipitation at the WWTC was 1.59". There were no days of excess flow during the month of June. There were no days of discharge over 11 MGD.
- Activated sludge: Good operating performance was observed throughout the month of June. Floc formers are still predominating leading to good solids settling.
- Anaerobic Digesters: Pumped a total of 1,169,132 gallons of primary sludge, 251,926 gallons of TWAS, and 186,047 gallons of waste grease for a total of 1,607,105 gallons pumped to digesters. Total Volatile Solids destruction was calculated at 77% for June.
- Digester gas: Total digester gas production was 4,198,634 cubic feet. 499,131 cubic feet of gas was used for anaerobic digestion heat, and 3,002,041 cubic feet was used in the CHP facilities. 663,167 cubic feet of flared gas was recorded during the month. The Munters dehumidifier used 34,295 cubic feet of gas.
- Biosolids: Bio-solids drying and delivery season continues. In the month of June we delivered 120 Dry tons of Class A bio solid.
- Miscellaneous: Stewart spreading was on-site from June 12th-20th cleaning out digester 4.
- Electricity: Overall net energy from ComEd was: 106,460 KW-Hrs. Electricity Generated by the CHP system was 243,599 KW-Hrs. Monthly net energy (including natural gas usage) was 110 MW-Hrs for the month of June.

C: WDVB, AES, JMW, KJR, RTJ, MJS, CS, DM

Downers Grove Sanitary District June 2023

Monthly Operations Report Page 1

	WWTC Rainfall	B01 Parshall Flume Flow Max	B01 Parshall Flume Flow Min	B01 Parshall Flume Flow Avg (Daily Total)	A01 Parshall Flume Flow Max	A01 Parshall Flume Flow Avg (Daily Total)	C01 Int Clar #1 Flow Max	C01 Int Clar #1 Flow Avg (Daily Total)	Outfall 003 Flow Max	Outfall 003 Flow Avg (Daily Total)	Total Flow Leaving WWTC Avg (Daily Total)	Total Flow Leaving WWTC Max MGD	002 Outfall Flow Avg (Daily Total)
Date	inches	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD
6/1/2023	0.01	11.33	4.20	7.55	0.00	0.00	0.00	0.00	0.00	0.00	7.55	11.33	0.00
6/2/2023	0.00	11.82	4.28	7.48	0.00	0.00	0.00	0.00	0.00	0.00	7.48	11.82	0.00
6/3/2023	0.00	10.67	4.33	7.20	0.00	0.00	0.00	0.00	0.00	0.00	7.20	10.67	0.00
6/4/2023	0.00	10.96	4.37	7.13	0.00	0.00	0.00	0.00	0.00	0.00	7.13	10.96	0.00
6/5/2023	0.00	10.25	4.13	7.23	0.00	0.00	0.00	0.00	0.00	0.00	7.23	10.25	0.00
6/6/2023	0.00	10.57	4.07	7.31	0.00	0.00	0.00	0.00	0.00	0.00	7.31	10.57	0.00
6/7/2023	0.00	9.55	4.08	7.14	0.00	0.00	0.00	0.00	0.00	0.00	7.14	9.55	0.00
6/8/2023	0.00	11.70	4.06	7.16	0.00	0.00	0.00	0.00	0.00	0.00	7.16	11.70	0.00
6/9/2023	0.00	11.81	4.21	7.15	0.00	0.00	0.00	0.00	0.00	0.00	7.15	11.81	0.00
6/10/2023	0.00	10.20	3.78	6.83	0.00	0.00	0.00	0.00	0.00	0.00	6.83	10.20	0.00
6/11/2023	0.04	11.04	3.91	7.09	0.00	0.00	0.00	0.00	0.00	0.00	7.09	11.04	0.00
6/12/2023	0.00	11.69	4.24	7.26	0.00	0.00	0.00	0.00	0.00	0.00	7.26	11.69	0.00
6/13/2023	0.30	13.43	4.13	8.18	0.00	0.00	0.00	0.00	0.00	0.00	8.18	13.43	0.00
6/14/2023	0.00	15.79	5.64	8.29	0.00	0.00	0.00	0.00	0.00	0.00	8.29	15.79	0.00
6/15/2023	0.00	11.41	4.53	7.51	0.00	0.00	0.00	0.00	0.00	0.00	7.51	11.41	0.00
6/16/2023	0.00	11.79	4.62	7.47	0.00	0.00	0.00	0.00	0.00	0.00	7.47	11.79	0.00
6/17/2023	0.00	11.21	4.43	7.16	0.00	0.00	0.00	0.00	0.00	0.00	7.16	11.21	0.00
6/18/2023	0.00	11.33	4.35	7.12	0.00	0.00	0.00	0.00	0.00	0.00	7.12	11.33	0.00
6/19/2023	0.00	11.94	4.09	7.01	0.00	0.00	0.00	0.00	0.00	0.00	7.01	11.94	0.00
6/20/2023	0.00	9.52	3.81	6.47	0.00	0.00	0.00	0.00	0.00	0.00	6.47	9.52	0.00
6/21/2023	0.00	10.18	3.60	6.37	0.00	0.00	0.00	0.00	0.00	0.00	6.37	10.18	0.00
6/22/2023	0.00	10.12	3.55	6.26	0.00	0.00	0.00	0.00	0.00	0.00	6.26	10.12	0.00
6/23/2023	0.00	12.78	3.43	6.17	0.00	0.00	0.00	0.00	0.00	0.00	6.17	12.78	0.00
6/24/2023	0.00	9.70	3.23	6.12	0.00	0.00	0.00	0.00	0.00	0.00	6.12	9.70	0.00
6/25/2023	0.93	19.00	5.76	10.63	0.00	0.00	0.00	0.00	0.00	0.00	10.63	19.00	0.00
6/26/2023	0.00	11.95	5.36	8.52	0.00	0.00	0.00	0.00	0.00	0.00	8.52	11.95	0.00
6/27/2023	0.00	9.92	4.21	7.17	0.00	0.00	0.00	0.00	0.00	0.00	7.17	9.92	0.00
6/28/2023	0.00	11.09	3.74	6.79	0.00	0.00	0.00	0.00	0.00	0.00	6.79	11.09	0.00
6/29/2023	0.31	10.00	3.79	6.89	0.00	0.00	0.00	0.00	0.00	0.00	6.89	10.00	0.00
6/30/2023	0.00	9.84	3.84	6.68	0.00	0.00	0.00	0.00	0.00	0.00	6.68	9.84	0.00
Minimum	0.00	9.52	3.23	6.12	0.00	0.00	0.00	0.00	0.00	0.00	6.12	9.52	0.00
Maximum	0.93	19.00	5.76	10.63	0.00	0.00	0.00	0.00	0.00	0.00	10.63	19.00	0.00
Total	1.59	342.62	125.79	217.31	0.00	0.00	0.00	0.00	0.00	0.00	217.31	342.62	0.00
Average	0.05	11.42	4.19	7.24	0.00	0.00	0.00	0.00	0.00	0.00	7.24	11.42	0.00

Downers Grove Sanitary District June, 2023

Monthly Operations Report Page 2

Date	Tertiary Flow MGD	MLSS Avg	Activated Sludge Inventory Lbs MLSS	Activated Sludge SRT Days	15 Minutes Aeration Settling %	30 Minutes Aeration Settling %	60 Minutes Aeration Settling %	Sludge Volume Index mL/g	System 1 RAS TSS	System 2 RAS TSS mg/l	Dupage River Outfall DO mg/I
6/1/2023	7.55	2,462	76,367	10.46	77	61	49	250	3,984		7.6
6/2/2023	7.48	2,549	79,087	13.83	83	68	53	266		3,539	
6/3/2023	7.20		79,087	13.84							
6/4/2023	7.13		79,087	13.85							
6/5/2023	7.23	2,719	84,346	11.54	80	66	52	243		4,392	7.6
6/6/2023	7.31	2,873	89,142	11.77	80	65	53	225	4,067		7.2
6/7/2023	7.14	2,720	84,383	10.11	71	53	43	192		4,830	7.5
6/8/2023	7.16	2,762	85,689	10.29	81	67	56	243	3,171		
6/9/2023	7.15	2,905	90,110	11.14	85	70	56	242		4,659	
6/10/2023	6.83		90,110	10.80							
6/11/2023	7.09		90,110	10.81							
6/12/2023	7.26	2,661	82,544	11.69	73	50	42	189		3,894	7.9
6/13/2023	8.18	2,860	88,713	12.31	75	58	45	203	3,815		7.2
6/14/2023	8.29	2,868	88,964	9.91	62	48	38	166		4,845	7.1
6/15/2023	7.51	2,600	80,649	9.01	78	62	38	238	3,261		
6/16/2023	7.47	3,075	95,383	10.08	75	52	44	171		5,112	
6/17/2023	7.16	·	95,383	10.05							
6/18/2023	7.12		111,096	10.10							
6/19/2023	7.01	2,851	88,450	10.38	52	38	31	132		4,594	7.3
6/20/2023	6.47	2,711	84,103	9.65	50	37	31	138	3,880	,	7.1
6/21/2023	6.37	2,740	84,993	9.32	43	33	28	119	-,	4,642	7.0
6/22/2023	6.26	2,497	77,471	8.52	41	34	26	136	4,074	,-	-
6/23/2023	6.17	2,619	81,238	10.21	41	31	25	118	1,011	4,053	
6/24/2023	6.12	_,0.0	81,238	10.18		0.				.,000	
6/25/2023	10.63		81,238	10.17							
6/26/2023	8.52	2,553	79,204	7.74	36	26	22	102		5,175	7.4
6/27/2023	7.17	2,412	74,825	7.35	33	25	21	102	4,017	3,770	7.7
6/28/2023	6.79	2,400	74,469	10.49	25	20	19	85	1,511	3,597	7.5
6/29/2023	6.89	2,400	64,258	9.07	27	20	18	98	3,516	0,007	7.0
6/30/2023	6.68	2,263	70,191	9.65	25	19	18	86	0,010	3,715	
0.0012020	0.00	2,203	70,191	3.03	23	19	10	00		5,7 15	
Minimum	6.12	2,071	64,257.95	7.35	25.48	19.50	18.00	85.41	3,171	3,539	7.0
Maximum	10.63	3,075	111,095.72	13.85	84.97	70.19	55.96	266.25	4,074	5,175	7.9
Total	217.31		2,511,930.54		1,293.35	1,004.72	807.75	3,743.07	33,785	57,047	96.1
Average	7.24	2,644	83,730.93	10.48	58.77	45.59	36.73	170.18	3,754	4,388	7.4

Downers Grove Sanitary District June, 2023

Monthly Operations Report Page 3

					100111					
	Tertiary Flow	Influent BOD 5	Primary Clarifier BOD 5	Intermediate Clarifier CBOD 5	Tertiary Effluent CBOD 5	Tertiary Effluent CBOD 5 Load	BOD 5 Removal %	Ambient Air Temp Min	Ambient Air Temp Max	Influent Flow Temp
Date	MGD	mg/l	mg/l	mg/l	mg/l		%	Deg F	Deg F	Deg F
6/1/2023	7.55	369	102	1.2	1.8	113	99.1	64	93	61.2
6/2/2023	7.48							63	94	
6/3/2023	7.20							65	92	
6/4/2023	7.13							58	82	
6/5/2023	7.23	307			1.9	115	98.9	52	89	61.8
6/6/2023	7.31	440	143	2.3	2.4	146	99.1	52	89	61.5
6/7/2023	7.14	347			2.4	143	98.8	56	79	62.4
6/8/2023	7.16	373	130	1.5	2.0	119	99.2	52	79	62.2
6/9/2023	7.15							49	87	
6/10/2023	6.83							55	89	
6/11/2023	7.09							53	72	
6/12/2023	7.26	413			1.8	109	99.4	50	73	63.1
6/13/2023	8.18	427	64	1.6	2.2	150	99.0	57	68	63.1
6/14/2023	8.29	380			2.2	152	98.4	59	83	63.0
6/15/2023	7.51	447	160	1.8	1.8	113	98.9	53	85	63.3
6/16/2023	7.47							51	73	
6/17/2023	7.16							51	88	
6/18/2023	7.12							57	88	
6/19/2023	7.01	513			2.0	117	99.3	60	88	64.0
6/20/2023	6.47	453	144	1.2	2.0	108	99.1	58	88	64.2
6/21/2023	6.37	400			1.6	85	99.1	61	91	64.4
6/22/2023	6.26	373	160	1.7	1.4	73	99.2	64	89	64.4
6/23/2023	6.17							64	89	
6/24/2023	6.12							61	97	
6/25/2023	10.63							66	87	
6/26/2023	8.52	340			1.8	128	99.1	69	76	64.4
6/27/2023	7.17	353	244	0.9	1.4	84	99.2	59	83	64.0
6/28/2023	6.79	293			1.4	79	99.2	55	83	64.2
6/29/2023	6.89	362	137	1.4	1.5	86	99.4	72	90	64.9
6/30/2023	6.68							70	93	
Minimum	6.12	293	64	0.9	1.40	73	98.4	49	68	61.2
Maximum	10.63	513	244	2.3	2.40	152	99.4	72	97	64.9
Total	217.31	6,590	1,284	13.6	31.60	1,920	1,684.3	1,076	2,559	1,076.1
Average	7.24	388	143	1.5	1.86	113	99.1	59	85	63.3

Monthly Operations Report Page 4

	Tertiary Flow	Influent TSS	Primary Clarifier TSS	Intermediate Clarifier TSS	Tertiary Effluent TSS	Tertiary Effluent TSS Load	TSS Removal %	Influent pH	Primary Clarifier pH	Tertiary Effluent pH	Intermediate pH
Date	MGD	mg/l	mg/l	mg/l	mg/l	lbs/day	%	SU	SU	SU	SU
6/1/2023	7.55	270	32	1.2	1.7	107	99.4	7.5	7.6	6.9	6.9
6/2/2023	7.48	173			0.9	56	99.5	7.7	7.3	6.9	7.2
6/3/2023	7.20	327			0.8	48	99.8				
6/4/2023	7.13	233			0.8	48	99.7				
6/5/2023	7.23	300			1.0	60	99.7	7.5	7.4	7.1	7.0
6/6/2023	7.31	360	79	1.0	1.0	61	99.7	7.6	7.5	7.1	7.0
6/7/2023	7.14	460			1.2	71	99.7	7.5	7.4	7.0	6.9
6/8/2023	7.16	340	72	3.8	0.9	54	99.7	7.4	7.6	7.1	6.9
6/9/2023	7.15	333			0.7	42	99.8	7.7	7.7	7.1	7.0
6/10/2023	6.83	287			0.7	40	99.8				
6/11/2023	7.09	292			0.8	47	99.7				
6/12/2023	7.26	450			0.8	48	99.8	7.5	7.4	6.9	7.1
6/13/2023	8.18	390	106	4.7	1.2	82	99.7	7.5	7.4	6.9	7.0
6/14/2023	8.29	350			1.9	131	99.5	7.5	7.4	6.8	7.0
6/15/2023	7.51	447	86	8.0	1.8	113	99.6	7.6	7.6	6.9	7.0
6/16/2023	7.47	310			1.9	118	99.4	7.6	7.6	6.9	7.1
6/17/2023	7.16	108			2.1	125	98.1				
6/18/2023	7.12	280			1.6	95	99.4				
6/19/2023	7.01	500			1.3	76	99.7	7.5	7.4	6.9	7.0
6/20/2023	6.47	387	54	2.8	1.4	76	99.6	7.5	7.6	7.0	7.0
6/21/2023	6.37	327			1.2	64	99.6	7.5	7.5	6.9	7.0
6/22/2023	6.26	300	91	7.0	1.0	52	99.7	7.5	7.3	6.9	7.0
6/23/2023	6.17	207			0.7	36	99.7	7.4	7.4	6.9	7.1
6/24/2023	6.12	280			1.0	51	99.6				
6/25/2023	10.63	250			1.8	160	99.3				
6/26/2023	8.52	330			1.3	92	99.6	7.6	7.4	7.1	7.1
6/27/2023	7.17	320	162	1.2	0.9	54	99.7	7.6	7.5	7.0	7.1
6/28/2023	6.79	230			0.9	51	99.6	7.4	7.6	7.0	7.2
6/29/2023	6.89	315	51	0.6	1.2	69	99.6	7.5	7.3	7.0	7.0
6/30/2023	6.68	248			0.6	33	99.8	7.5	7.4	6.9	7.0
Minimum	6.12	108	32	0.6	0.6	33	98.1	7.4	7.3	6.8	6.9
Maximum	10.63	500	162	8.0	2.1	160	99.8	7.7	7.7	7.1	7.2
Total	217.31	9,404	733	30.3	35.1	2,161	2,987.4	165.6	164.3	153.2	154.6
Average	7.24	313	81	3.4	1.2	72	99.6	7.5	7.5	7.0	7.0

Downers Grove Sanitary District

June, 2023

MONTHLY OPERATIONS REPORT PAGE 5

	Tertiary	Influent	Tertiary Effluent	Tertiary Effluent	Chlorine	Fecal
	Flow	Ammonia-N	Ammonia-N	Ammonia-N Load	Residual	Coliform
Date	MGD	mg/l	mg/l	lbs/day	mg/l	col/100ml
6/1/2023	7.55	20.10	0.10	6.3		
6/2/2023	7.48					
6/3/2023	7.20					
6/4/2023	7.13	26.29	0.10	5.9		
6/5/2023	7.23	30.65	0.10	6.0		
6/6/2023	7.31	33.04	0.10	6.1	0.015	51
6/7/2023	7.14	24.77	0.24	14.3	0.015	
6/8/2023	7.16	25.89	0.10	6.0		4
6/9/2023	7.15					
6/10/2023	6.83					
6/11/2023	7.09	22.28	0.10	5.9		
6/12/2023	7.26	31.59	0.10	6.1		
6/13/2023	8.18				0.015	9
6/14/2023	8.29				0.015	5
6/15/2023	7.51	28.64	0.65	40.7		
6/16/2023	7.47					
6/17/2023	7.16					
6/18/2023	7.12	28.10	0.14	8.3		
6/19/2023	7.01	26.56	0.10	5.8		
6/20/2023	6.47	28.37	0.10	5.4	0.015	0
6/21/2023	6.37	23.10	0.10	5.3	0.015	3
6/22/2023	6.26	21.35	0.10	5.2		
6/23/2023	6.17					
6/24/2023	6.12					
6/25/2023	10.63	14.99	0.19	16.8		
6/26/2023	8.52	17.73	0.10	7.1		
6/27/2023	7.17	18.80	0.10	6.0	0.015	3
6/28/2023	6.79	20.84	0.10	5.7	0.015	2
6/29/2023	6.89	21.07	0.10	5.7		
6/30/2023	6.68					
Minimum	6.12	14.99	0.10	5.2	0.015	0.0
Maximum	10.63	33.04	0.65	40.7	0.015	51.0
Total	217.31	464.16	2.72	168.7	0.120	77.0
Average	7.24	24.43	0.14	8.9	0.015	5.6

2.00 %	1,169,132	Gallons
1.83 %	651,680	Gallons
4.85 %	251,926	Gallons
12.32 %	186,047	Gallons
ļ.		
2.88 %	478,836	Gallons
2.50 %	243,227	Gallons
3.05 %	162,816	
	884,879	
	76.7	%
	120	Dry Tons
Jun		Dry Tons
		Dry Tons
	442	Dry Tons
		Dry Tons
YTD	442	Dry Tons
	4,198,634	SCF
ls Load	7.1	Cu.Ft./Lb.
Ū	499,131	
CHP		
Total		
	663,167	SCF
	•	
		SCF
Walnut		SCF
	110	MWH
_		
		Cu. Yds
YTD		Cu. Yds
	· ·	
		Gals/Day
	173,686	Gallons
	1.83 % 4.85 % 12.32 % 2.88 % 2.50 % 3.05 % Jun Jun Jun YTD YTD YTD YTD YTD Aduction ds Load hangers iffication	1.83 % 651,680 4.85 % 251,926 12.32 % 186,047 2.88 % 478,836 2.50 % 243,227 3.05 % 162,816 884,879 76.7 Jun 120 Jun 120 YTD 442 YTD YTD 442 YTD YTD 442 YTD YTD 3,002,041 Total 3,535,467 663,167 WWTC 7,400 MSB 3,000 al Feed 0 Walnut 0 243,599 106,460 110 Jun 20 YTD 100 502,845

Downers Grove Sanitary District

June, 2023

Monthly Operations Report Page 6

	Tertiary Flow	Influent Phosphorus	Tertiary Effluent Phosphorus	Influent Phosphorus Load	Tertiary Effluent Phosphorus Load	Phosphorus Removal %	Influent Nitrogen	Tertiary Effluent Nitrogen	Influent Nitrogen Load	Tertiary Effluent Nitrogen Load	Nitrogen Removal %	Tertiary Effluent Nitrate Grab
Date	MGD	mg/l	mg/l	lbs/day	lbs/day	%	mg/l	mg/l	lbs/day	lbs/day	%	mg/l
6/1/2023	7.55											
6/2/2023	7.48											
6/3/2023	7.20											
6/4/2023	7.13											
6/5/2023	7.23	8.51	5.31	431.8	320.2	37.6						
6/6/2023	7.31											
6/7/2023	7.14											
6/8/2023	7.16											
6/9/2023	7.15											
6/10/2023	6.83											
6/11/2023	7.09											
6/12/2023	7.26	9.28	5.44	461.6	329.5	41.4						
6/13/2023	8.18						55.1	22.2	3,115.5	1,514.2	51.4	
6/14/2023	8.29											
6/15/2023	7.51											
6/16/2023	7.47											
6/17/2023	7.16											
6/18/2023	7.12											
6/19/2023	7.01	9.37	5.70	478.1	333.4	39.2						
6/20/2023	6.47											
6/21/2023	6.37											
6/22/2023	6.26											
6/23/2023	6.17											
6/24/2023	6.12											
6/25/2023	10.63											
6/26/2023	8.52	5.71	3.80	357.3	270.1	33.5						
6/27/2023	7.17											
6/28/2023	6.79											
6/29/2023	6.89											
6/30/2023	6.68											21.50
Minimum	6.12	5.71	3.80	357.3	270.1	33.5	55.1	22.2	3,115.5	1,514.2	51.4	21.50
Maximum	10.63	9.37	5.70	478.1	333.4	41.4	55.1	22.2	3,115.5	1,514.2	51.4	21.50
Total	217.31	32.87	20.25	1,728.7	1,253.2	151.6	55.1	22.2	3,115.5	1,514.2	51.4	21.50
Average	7.24	8.22	5.06	432.2	313.3	37.9	55.1	22.2	3,115.5	1,514.2	51.4	21.50

Permit

Permit #: IL0028380

DOWNERS GROVE SANITARY DISTRICT Permittee:

Major: Yes **Permittee Address:** 2710 CURTISS STREET PO BOX 1412

DOWNERS GROVE, IL 60515

Facility Location: 5003 WALNUT AVENUE DOWNERS GROVE, IL 60515

Facility:

DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER

Permitted Feature:

001 External Outfall Discharge: 001-0

COMBINED DISCHARGE FROM A01, B01, & C01

Report Dates & Status

Monitoring Period: From 06/01/23 to 06/30/23 **DMR Due Date:** 07/25/23 Status: **NetDMR Validated**

Considerations for Form Completion

W0430300002; NUMBER OF DAYS OF DISCHARGE.COMBINED OUTFALLS: A01-MIXING CHAMBER DISCHARGE TO E BR OF DUPAGE RIVER-EFFECTIVE WHEN FLOWS TO TRT PLT ARE GREATER THAN 22 MGD & EXCESS FLOW FAC IS IN OPERATION. 002 BECOMES OPERATIONAL WHEN 001, A01,& B01 EXCEED 30 MGD.

Principal Executive Officer

Amy First Name:

Title: General Manager Telephone: 630-969-0664

Last Name: Underwood

No Data Indicator (NODI)

Form NODI:

	Parameter	Monitoring Location	Season	# Param. NOD	I		Quanti	ity or Loading					Quality or Concentra	ation			# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1 Qualifier	2 Value 2	Units	Qualifier	1 Value 1	Qualifier	r 2 Value 2	Qualifier 3	Value 3	Units			
					Sample					=	7.4	=	7.1	=	7.0	19 - mg/L		DL/DS - Daily When Discharging	GR - GRAB
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0		Permit Req						Req Mon MO AV Mi	N	Req Mon MN WK A	V	Req Mon DAILY MN	N 19 - mg/L	0	DL/DS - Daily When Discharging	GR - GRAB
00000	exygen, alcoonton [20]	1 Lindon Groos			Value NOD														
					Sample							=	3.6	=	4.4	19 - mg/L		04/07 - Four Per Week	CP - COMPOS
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0		Permit Req							<=	30.0 MO AVG	<=	45.0 WKLY AVG	19 - mg/L	0	DL/DS - Daily When Discharging	GR - GRAB
00010	505, 5 day, 20 deg. 5	1 Emacin Gloss			Value NOD														
					Sample					=	6.8			=	7.1	12 - SU		05/DW - 5 Days Every Week	GR - GRAB
00400	pH	1 - Effluent Gross	0		Permit Req					>=	6.0 MINIMUM			<=	9.0 MAXIMUM	12 - SU	0	DL/DS - Daily When Discharging	GR - GRAB
00.00	P				Value NOD														
					Sample							=	1.2	=	1.5	19 - mg/L		05/DW - 5 Days Every Week	CP - COMPOS
00530	Solids, total suspended	1 - Effluent Gross	0		Permit Req							<=	30.0 MO AVG	<=	45.0 WKLY AVG	19 - mg/L	0	DL/DS - Daily When Discharging	GR - GRAB
00000	Conus, total suspended	1 Lindon Groos			Value NOD														
					Sample							=	0.14	=	0.6	19 - mg/L		05/DW - 5 Days Every Week	CP - COMPOS
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0		Permit Req								Req Mon MO AVG		Req Mon DAILY MX	(19 - mg/L	0	DL/DS - Daily When Discharging	GR - GRAB
					Value NOD	ı													
					Sample							=	5.06	=	5.7	19 - mg/L		04/30 - Four Per Month	CP - COMPOS
00665	Phosphorus, total [as P]	1 - Effluent Gross	0		Permit Req								Req Mon MO AVG		Req Mon DAILY MX	(19 - mg/L	0	DL/DS - Daily When Discharging	GR - GRAB
00000	r noophorae, total [ao 1]	1 Lindon Groos			Value NOD	1													
					Sample							=	0.02			19 - mg/L		02/DW - Twice Every Discharge We	ek GR - GRAB
50060	Chlorine, total residual	1 - Effluent Gross	0		Permit Req							<=	0.75 MO AVG			19 - mg/L	0	DL/DS - Daily When Discharging	GR - GRAB
					Value NOD	ı													
					Sample									=	51.0	13 - #/100mL		02/DW - Twice Every Discharge We	ek GR - GRAB
74055	Coliform, fecal general	1 - Effluent Gross	0		Permit Req									<=	400.0 DAILY MX	13 - #/100mL	0	DL/DS - Daily When Discharging	GR - GRAB
	, 3				Value NOD	ı													
					Sample		=	217.31	80 - Mgal/mo									99/99 - Continuous	
82220	Flow, total	1 - Effluent Gross	0		Permit Req			Req Mon MO TOTA	L 80 - Mgal/mo								0	99/99 - Continuous	
					Value NOD	ı													

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

30 days discharge. Zero days combined with A01 and zero days combined with C01.

Attachments

No attachments.

Report Last Saved By

DOWNERS GROVE SANITARY DISTRICT

User: ARUNDERWOOD
Name: Amy Underwood
E-Mail: aunderwood@dgsd.org

Date/Time: 2023-07-12 14:11 (Time Zone: -05:00)

Report Last Signed By

User: ARUNDERWOOD
Name: Amy Underwood
E-Mail: aunderwood@dgsd.org

Date/Time: 2023-07-12 14:11 (Time Zone: -05:00)

Permit

Major:

Permit #: IL0028380

Permittee:

DOWNERS GROVE SANITARY DISTRICT

2710 CURTISS STREET PO BOX 1412

DOWNERS GROVE, IL 60515

Facility: DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER

Facility Location: 5003 WALNUT AVENUE

DOWNERS GROVE, IL 60515

Permitted Feature: 002

External Outfall

Discharge:

Permittee Address:

002-0

MIXING CHAMBER OVERFLOW TO ST JOSEPH CRK

Report Dates & Status

Monitoring Period: From 06/01/23 to 06/30/23

DMR Due Date: 07/25/23

Status: NetDMR Validated

Considerations for Form Completion

W0430300002; NUMBER OF DAYS OF DISCHARGE:CS

Underwood

Yes

Principal Executive Officer

First Name: Amy

Title:

General Manager

Telephone:

630-969-0664

No Data Indicator (NODI)

Form NODI:

Last Name:

	Parameter	Monitoring Location	Season	# Param. NOD			Quanti	ity or Loading					Quality or Concentr	ation			# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1 V	alue 1 Qualifier	2 Value 2	Units	Qualifier 1	Value 1	Qualifier 2	2 Value 2	Qualifier 3	Value 3	Units			
					Sample												- !		
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0		Permit Req										Req Mon DAILY MN	-	- !	DL/DS - Daily When Discharging	GR - GRAB
					Value NOD	1									C - No Discharge				
					Sample														
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0		Permit Req							<=	30.0 MO AVG	<=	45.0 WKLY AVG	19 - mg/L	-	DL/DS - Daily When Discharging	GR - GRAB
					Value NOD	1							C - No Discharge)	C - No Discharge				
					Sample														
00400	pH	1 - Effluent Gross	0		Permit Req					>=	6.0 MINIMUM			<=	9.0 MAXIMUM	12 - SU	- !	DL/DS - Daily When Discharging	GR - GRAB
					Value NOD	1					C - No Discharge				C - No Discharge				
					Sample														
00530	Solids, total suspended	1 - Effluent Gross	0		Permit Req							<=	30.0 MO AVG	<=	45.0 WKLY AVG	19 - mg/L		DL/DS - Daily When Discharging	GR - GRAB
					Value NOD	I							C - No Discharge)	C - No Discharge				
					Sample														
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0		Permit Req										Req Mon DAILY MX	19 - mg/L	- !	DL/DS - Daily When Discharging	GR - GRAB
					Value NOD	1									C - No Discharge				
					Sample														
00665	Phosphorus, total [as P]	1 - Effluent Gross	0		Permit Req								Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L	- !	DL/DS - Daily When Discharging	GR - GRAB
					Value NOD	1							C - No Discharge	•	C - No Discharge				
					Sample														
50060	Chlorine, total residual	1 - Effluent Gross	0		Permit Req							<=	0.75 MO AVG			19 - mg/L	-	DL/DS - Daily When Discharging	GR - GRAB
					Value NOD	I							C - No Discharge	•					
					Sample														
74055	Coliform, fecal general	1 - Effluent Gross	0		Permit Req									<=	400.0 DAILY MX	13 - #/100mL		DL/DS - Daily When Discharging	GR - GRAB
					Value NOD	I									C - No Discharge				
					Sample														
82220	Flow, total	1 - Effluent Gross	0		Permit Req			Req Mon MO TOTA	AL 80 - Mgal/mo	0								DL/DS - Daily When Discharging	
					Value NOD	1		C - No Discharg	e										

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

DOWNERS GROVE SANITARY DISTRICT

User: reeseberry

Name: Dorrance Berry
E-Mail: rberry@dgsd.org

Date/Time: 2023-07-06 15:05 (Time Zone: -05:00)

Report Last Signed By

User: reeseberry
Name: Dorrance Berry
E-Mail: rberry@dgsd.org

Date/Time: 2023-07-06 15:46 (Time Zone: -05:00)

Permit

Major:

IL0028380 Permit #:

DOWNERS GROVE SANITARY DISTRICT Permittee:

2710 CURTISS STREET PO BOX 1412 **Permittee Address:**

DOWNERS GROVE, IL 60515

Facility Location:

Facility:

Status:

DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER

5003 WALNUT AVENUE

Permitted Feature: 003

External Outfall

Discharge: 003-0

Title:

EXCESS FLOW TO ST JOSEPH CREEK

Report Dates & Status

Monitoring Period: From 06/01/23 to 06/30/23

Yes

DMR Due Date: 07/25/23

NetDMR Validated

Considerations for Form Completion

W0430300002; NUMBER OF DAYS OF DISCHARGE:CS

Principal Executive Officer

First Name: Amy

Last Name: Underwood General Manager

Telephone:

630-969-0664

DOWNERS GROVE, IL 60515

No Data Indicator (NODI)

Form NODI:

	Parameter	Monitoring Location	Season #	# Param. NOD		Quantity or	r Loading				(Quality or Concentra	ition			# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1 Value 1 Qualifier 2	Value 2	Units 0	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0		Sample Permit Req. Value NODI									Req Mon DAILY MN C - No Discharge	19 - mg/L	DL	/DS - Daily When Discharging	GR - GRAB
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0		Sample Permit Req. Value NODI						<=	30.0 MO AVG C - No Discharge	<=	45.0 WKLY AVG C - No Discharge	19 - mg/L	DL	/DS - Daily When Discharging	GR - GRAB
00400	рН	1 - Effluent Gross	0		Sample Permit Req. Value NODI			>	-	i.0 MINIMUM C - No Discharge			<=	9.0 MAXIMUM C - No Discharge	12 - SU	DL	/DS - Daily When Discharging	GR - GRAB
00530	Solids, total suspended	1 - Effluent Gross	0		Sample Permit Req. Value NODI						<=	30.0 MO AVG C - No Discharge	<=	45.0 WKLY AVG C - No Discharge	19 - mg/L	DL	/DS - Daily When Discharging	GR - GRAB
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0		Sample Permit Req. Value NODI									Req Mon DAILY MX C - No Discharge	19 - mg/L	DL	/DS - Daily When Discharging	GR - GRAB
00665	Phosphorus, total [as P]	1 - Effluent Gross	0		Sample Permit Req. Value NODI							Req Mon MO AVG C - No Discharge		Req Mon DAILY MX C - No Discharge	19 - mg/L	DL	/DS - Daily When Discharging	GR - GRAB
50060	Chlorine, total residual	1 - Effluent Gross	0		Sample Permit Req. Value NODI						<=	0.75 MO AVG C - No Discharge			19 - mg/L	DL	/DS - Daily When Discharging	GR - GRAB
74055	Coliform, fecal general	1 - Effluent Gross	0		Sample Permit Req. Value NODI								<=	400.0 DAILY MX C - No Discharge	13 - #/100mL	DL	/DS - Daily When Discharging	GR - GRAB
82220	Flow, total	1 - Effluent Gross	0		Sample Permit Req. Value NODI		q Mon MO TOTAL - No Discharge	80 - Mgal/mo								DL	/DS - Daily When Discharging	

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

DOWNERS GROVE SANITARY DISTRICT

User: reeseberry Name: Dorrance Berry
E-Mail: rberry@dgsd.org

Date/Time: 2023-07-06 15:05 (Time Zone: -05:00)

Report Last Signed By

User: reeseberry
Name: Dorrance Berry
E-Mail: rberry@dgsd.org

Date/Time: 2023-07-06 15:46 (Time Zone: -05:00)

Permit

Major:

Permit #: IL0028380

Yes

DOWNERS GROVE SANITARY DISTRICT Permittee:

Permittee Address:

2710 CURTISS STREET PO BOX 1412

DOWNERS GROVE, IL 60515

Facility:

DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER

Facility Location:

5003 WALNUT AVENUE

DOWNERS GROVE, IL 60515

A01 **Permitted Feature:**

External Outfall

Discharge: A01-0

EXCESS FLOW FROM EXCESS FLOW CLARIFIERS

Report Dates & Status

Monitoring Period: From 06/01/23 to 06/30/23 **DMR Due Date:** 07/25/23 Status: **NetDMR Validated**

Considerations for Form Completion

W0430300002; NUMBER OF DAYS OF DISCHARGE:CS

Underwood

Principal Executive Officer

First Name:

Title:

General Manager

Telephone:

630-969-0664

No Data Indicator (NODI)

Form NODI:

Last Name:

	Parameter	Monitoring Location	Season #	Param. NODI			Quantity	or Loading				Quality or Con	centration		# of	Ex. Frequency of Analysis	Sample Typ
Code	Name					Qualifier 1 Value	1 Qualifier 2	Value 2	Units	Qualifier 1 Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units		
					Sample												
0310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0		Permit Req.									Req Mon DAILY MX	19 - mg/L	DL/DS - Daily When Dischargin	g GR - GRAB
	, ,,				Value NODI									C - No Discharge			
					Sample												
530	Solids, total suspended	1 - Effluent Gross	0		Permit Req.									Req Mon DAILY MX	19 - mg/L	DL/DS - Daily When Dischargin	g GR - GRAB
					Value NODI									C - No Discharge			
					Sample												
610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0		Permit Req.									Req Mon DAILY MX	19 - mg/L	DL/DS - Daily When Dischargin	g GR - GRAB
					Value NODI									C - No Discharge			
					Sample												
0665	Phosphorus, total [as P]	1 - Effluent Gross	0		Permit Req.							Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L	DL/DS - Daily When Dischargin	g GR - GRAB
					Value NODI							C - No Discharge)	C - No Discharge			
					Sample												
2220	Flow, total	1 - Effluent Gross	0		Permit Req.		R	Req Mon MO TOTAL 8	0 - Mgal/mo							DL/DS - Daily When Dischargin	g CN - CONTI
					Value NODI			C - No Discharge									

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

DOWNERS GROVE SANITARY DISTRICT

User: reeseberry Name: Dorrance Berry E-Mail: rberry@dgsd.org

Date/Time: 2023-07-06 15:05 (Time Zone: -05:00)

Report Last Signed By

User: reeseberry Name: Dorrance Berry E-Mail: rberry@dgsd.org

2023-07-06 15:46 (Time Zone: -05:00) Date/Time:

Permit

Permit #: IL0028380

Permittee: **Permittee Address:**

DOWNERS GROVE SANITARY DISTRICT

Major: Yes 2710 CURTISS STREET PO BOX 1412

DOWNERS GROVE, IL 60515

Facility Location:

Facility:

DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER

5003 WALNUT AVENUE DOWNERS GROVE, IL 60515

Permitted Feature:

B01 External Outfall Discharge: B01-0

MIXING CHAMBER DISCHARGE TO THE E BRANCH DUPAGE RVR

Report Dates & Status

Monitoring Period: From 06/01/23 to 06/30/23 DMR Due Date: 07/25/23 Status:

NetDMR Validated

Considerations for Form Completion

W0430300002; DMF LOAD LIMITS DISPLAYED.

Principal Executive Officer

First Name: Amy

Last Name: Underwood Title: General Manager Telephone:

630-969-0664

No Data Indicator (NODI)

Form NODI:

	Parameter	Monitoring Location	Season	# Param. NOD	I		Qua	antity or Lo	ading					Quality or Cond	centration			# of Ex	x. Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	2 Value 2	Units	Qualifier 1	Value 1	Qualifier	2 Value 2	Qualifie	r 3 Value 3	Units			
					Sample										=	65.5	15 - deg F		01/30 - Monthly	GR - GRAB
00011	Temperature, water deg. fahrenheit	1 - Effluent Gross	0		Permit Req	1.										Req Mon MO MAX	15 - deg F	0	01/30 - Monthly	GR - GRAB
00011	remperature, nator degricumentes	1 Emacin Groot			Value NOD	OI .														
					Sample								=	7.1	=	7.0	19 - mg/L	+-	03/DW - 3 Days Every Week	k GR - GRAB
00000	Overson discolved [DO]	4 F#luant Cross	0		Permit Rec	1.							>=		>=		19 - mg/L	0	02/DA - 2 Days Every Week	
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	U		Value NOD													- 0	, ,	
					Sample						=	6.8			=	7.1	12 - SU		05/DW - 5 Days Every Week	k GR - GRAB
		. =			Permit Reg	1						6.0 MINIMUN	1		<=	9.0 MAXIMUM	12 - SU	-	02/DA - 2 Days Every Week	
00400	рн	1 - Effluent Gross	0									0.0					00	0	02/2/1 2 Baye 210.9 1100.0	0.000
					Value NOD	01														
					Sample										=	100.0	19 - mg/L		01/30 - Monthly	CP - COMPO
00410	Alkalinity, total [as CaCO3]	1 - Effluent Gross	0		Permit Req	1.										Req Mon DAILY MX	19 - mg/L	0	01/30 - Monthly	CP - COMPO
					Value NOD	I														
					Sample	=	72.0	=	159.52	26 - Ib/d			=	1.2	=	2.1	19 - mg/L		05/DW - 5 Days Every Weel	k CP - COMPO
00530	Solids, total suspended	1 - Effluent Gross	0		Permit Req	 . <=	2202.0 MO AVG	<=	4404.0 DAILY MX	26 - Ib/d			<=	12.0 MO AVG	<=	24.0 DAILY MX	19 - mg/L	0	02/DA - 2 Days Every Week	CP - COMPO
00000	Contact Cacponaca				Value NOD)I														
					Sample										=	22.2	19 - mg/L	_	01/30 - Monthly	CP - COMPO
		. =			Permit Reg	1										Req Mon DAILY MX		0	01/30 - Monthly	CP - COMPO
00600	Nitrogen, total [as N]	1 - Effluent Gross	0		Value NOD											rtoq Mon Bruzi ins	io ing/L	0	o 1700 Monany	OI COMIT
									10.00	22 11 / 1								4		
					Sample		8.88	=	40.69	26 - lb/d			=	0.14	=	0.6	19 - mg/L	-	05/DW - 5 Days Every Week	
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	5		Permit Req		275.0 MO AVG	<=	550.0 DAILY MX	26 - lb/d			<=	1.5 MO AVG	<=	3.0 DAILY MX	19 - mg/L	0	02/DA - 2 Days Every Week	. CP - COMPC
					Value NOD	OI .														
					Sample										=	1.0	19 - mg/L		01/30 - Monthly	CP - COMPO
00625	Nitrogen, Kjeldahl, total [as N]	1 - Effluent Gross	0		Permit Req	1.										Req Mon DAILY MX	19 - mg/L	0	01/30 - Monthly	CP - COMPO
	The second secon				Value NOD)I														
					Sample										_	22.2	19 - mg/L		01/30 - Monthly	CA - CALCTI
00000	NICO NICO A A A DE NIO	4 5			Permit Reg	1.										Req Mon DAILY MX	-	0	01/30 - Monthly	CA - CALCTI
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	U		Value NOD												- 3	- 0	,	
						1								5.00		5.7	10 "		04/00 5 5 14 4	0D 00MD0
					Sample								=	5.06	=	5.7	19 - mg/L		04/30 - Four Per Month	CP - COMPC
00665	Phosphorus, total [as P]	1 - Effluent Gross	0		Permit Req	1.								Req Mon MO AV	G	Req Mon DAILY MX	19 - mg/L	0	01/30 - Monthly	CP - COMPC
					Value NOD	OI .														
					Sample								=	5.08	=	5.08	19 - mg/L		01/30 - Monthly	CP - COMPC
00666	Phosphorus, dissolved	1 - Effluent Gross	0		Permit Req	1.								Req Mon MO AV	'G	Req Mon DAILY MX	19 - mg/L	0	01/30 - Monthly	CP - COMPO
	•				Value NOD) I														
					Sample										=	164.0	19 - mg/L		01/30 - Monthly	GR - GRAB
00040	Chlorido [as Cl]	1 - Effluent Gross	0		Permit Req											Req Mon DAILY MX			01/30 - Monthly	GR - GRAB
00940	Chloride [as CI]	i - Emuent Gross	U	_	Value NOD													U		
																0.0	22 0/			
					Sample Parmit Base					-					=	0.0 10.0 MAXIMUM	23 - %			
30500	Coliform, fecal - % samples exceeding limit	1 - Effluent Gross	0		Permit Req										<=	IU.U IVIAXIIVIUIVI	23 - 7/0	0		
					Value NOD)I														

				Sample	=	7.24	=	10.63	03 - MGD						99/99 - Continuous	
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	 Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD					0	99/99 - Continuous	
	,			Value NODI												
				Sample								=	0.015	19 - mg/L	02/DA - 2 Days Every Week	GR - GRAB
50060	Chlorine, total residual	1 - Effluent Gross	0	 Permit Req.								<=	0.05 DAILY MX	19 - mg/L 0	02/DA - 2 Days Every Week	GR - GRAB
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Value NODI												
				Sample						=	5.56	-	51.0	13 - #/100mL	02/DA - 2 Days Every Week	GR - GRAB
74055	Coliform, fecal general	1 - Effluent Gross	0	 Permit Req.						<=	200.0 GEO MEA	1	Req Mon DAILY M	X 13 - #/100mL 0	02/DA - 2 Days Every Week	GR - GRAB
	3			Value NODI												
				Sample	=	112.97	=	152.17	26 - lb/d	=	1.9	=	2.4	19 - mg/L	04/07 - Four Per Week	CP - COMPOS
80082	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	 Permit Req.	<=	1835.0 MO AVG	<=	3670.0 DAILY MX	26 - lb/d	<=	10.0 MO AVG	<=	20.0 DAILY MX	19 - mg/L 0	02/DA - 2 Days Every Week	CP - COMPOS
				Value NODI												

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

DOWNERS GROVE SANITARY DISTRICT

User: ARUNDERWOOD
Name: Amy Underwood
E-Mail: aunderwood@dgsd.org

Date/Time: 2023-07-12 14:07 (Time Zone: -05:00)

Report Last Signed By

User: ARUNDERWOOD

Name: Amy Underwood

E-Mail: aunderwood@dgsd.org

Date/Time: 2023-07-12 14:07 (Time Zone: -05:00)

01046 Iron, dissolved [as Fe]

1 - Effluent Gross 0

Value NODI

Permit Permittee: Permit #: IL0028380 DOWNERS GROVE SANITARY DISTRICT Facility: DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER Major: Yes Permittee Address: 2710 CURTISS STREET PO BOX 1412 **Facility Location: 5003 WALNUT AVENUE** DOWNERS GROVE, IL 60515 DOWNERS GROVE, IL 60515 B01 Discharge: Permitted Feature: B01-S External Outfall SEMI ANNUAL SAMPLING AT B01 Report Dates & Status From 03/01/23 to 06/30/23 **DMR Due Date:** Status: **Monitoring Period:** 07/25/23 **NetDMR Validated Considerations for Form Completion** W0430300002 **Principal Executive Officer** First Name: Title: General Manager Telephone: 630-969-0664 Last Name: Underwood No Data Indicator (NODI) Form NODI: Monitoring Location Season # Param. NODI **Quantity or Loading Quality or Concentration** # of Ex. Frequency of Analysis Sample Type Code Qualifier 1 Value 1 Qualifier 2 Value 2 Units Qualifier 1 Value 1 Qualifier 2 Value 2 Qualifier 3 Value 3 Sample 19 - mg/L 09/99 - See Permit GR - GRAB Req Mon DAILY MX 19 - mg/L Permit Req 09/99 - See Permit GR - GRAB 00556 **Oil & Grease** 1 - Effluent Gross 0 Value NOD GR - GRAB Sample 5.0 28 - ug/L 09/99 - See Permit Req Mon DAILY MX 28 - ug/L Permit Reg 09/99 - See Permit GR - GRAB 1 - Effluent Gross 0 00720 Cyanide, total [as CN] Value NODI Sample 5.0 28 - ug/L 09/99 - See Permit GR - GRAB Req Mon DAILY MX 28 - ug/L 09/99 - See Permit GR - GRAB Permit Req. 00722 **Cyanide, free [amenable to chlorination]** 1 - Effluent Gross 0 Value NODI 24 - COMP24 Sample 0.61 19 - mg/L 09/99 - See Permit Req Mon DAILY MX 19 - mg/L 0 Permit Reg. 09/99 - See Permit 24 - COMP24 1 - Effluent Gross 0 00951 Fluoride, total [as F] Value NODI Sample 19 - mg/L 09/99 - See Permit 24 - COMP24 **Permit Req** Req Mon DAILY MX 19 - mg/L 09/99 - See Permit 24 - COMP24 01002 Arsenic, total [as As] 1 - Effluent Gross 0 Value NODI 0.023 19 - mg/L 09/99 - See Permit 24 - COMP24 Sample Req Mon DAILY MX 19 - mg/L Permit Reg 09/99 - See Permit 24 - COMP24 01007 Barium, total [as Ba] 1 - Effluent Gross 0 Value NODI Sample 0.004 19 - mg/L 09/99 - See Permit 24 - COMP24 Req Mon DAILY MX 19 - mg/L 0 09/99 - See Permit 24 - COMP24 Permit Req. 01012 Beryllium, total [as Be] 1 - Effluent Gross 0 Value NODI 24 - COMP24 Sample 0.001 19 - mg/L 09/99 - See Permit Req Mon DAILY MX 19 - mg/L 0 Permit Req 09/99 - See Permit 24 - COMP24 01027 Cadmium, total [as Cd] 1 - Effluent Gross 0 Value NODI 0.005 GR - GRAB Sample 19 - mg/L 09/99 - See Permit 09/99 - See Permit GR - GRAB Permit Req. Req Mon DAILY MX 19 - mg/L 01032 Chromium, hexavalent [as Cr] 1 - Effluent Gross 0 Value NODI 19 - mg/L Sample 0.005 09/99 - See Permit 24 - COMP24 Req Mon DAILY MX 19 - mg/L 0 Permit Req 09/99 - See Permit 24 - COMP24 01034 Chromium, total [as Cr] 1 - Effluent Gross 0 Value NODI Sample 0.006 19 - mg/L 09/99 - See Permit 24 - COMP24 Permit Req Req Mon DAILY MX 19 - mg/L 09/99 - See Permit 24 - COMP24 01042 Copper, total [as Cu] 1 - Effluent Gross 0 Value NODI 24 - COMP24 Sample 0.07 19 - mg/L 09/99 - See Permit Req Mon DAILY MX 19 - mg/L 0 Permit Req 09/99 - See Permit 24 - COMP24 01045 Iron, total [as Fe] 1 - Effluent Gross 0 Value NODI Sample 24 - COMP24 19 - mg/L 09/99 - See Permit Req Mon DAILY MX 19 - mg/L 0 09/99 - See Permit 24 - COMP24 Permit Req

				Sample	<	0.005	19 - mg/L	09/99 - See Permit	24 - COMP24
01051	Lead, total [as Pb]	1 - Effluent Gross	0	 Permit Req.		Req Mon DAILY MX	19 - mg/L	09/99 - See Permit	24 - COMP24
01001	Load, total [as I s]	1 Emacin Gross		Value NODI					
				Sample	=	0.031	19 - mg/L	09/99 - See Permit	24 - COMP24
01055	Manganese, total [as Mn]	1 - Effluent Gross	0	 Permit Req.		Req Mon DAILY MX	19 - mg/L	09/99 - See Permit	24 - COMP24
01000	manganese, tetal [as mm]	. Lindon Groos		Value NODI					
				Sample	<	0.01	19 - mg/L	09/99 - See Permit	24 - COMP24
01059	Thallium, total [as TI]	1 - Effluent Gross	0	 Permit Req.		Req Mon DAILY MX	19 - mg/L ₀	09/99 - See Permit	24 - COMP24
				Value NODI					
				Sample	=	0.005	19 - mg/L	09/99 - See Permit	24 - COMP24
01067	Nickel, total [as Ni]	1 - Effluent Gross	0	 Permit Req.		Req Mon DAILY MX	19 - mg/L ₀	09/99 - See Permit	24 - COMP24
				Value NODI					
				Sample	<	0.003	19 - mg/L	09/99 - See Permit	24 - COMP24
01077	Silver, total [as Ag]	1 - Effluent Gross	0	 Permit Req.		Req Mon DAILY MX	19 - mg/L ₀	09/99 - See Permit	24 - COMP24
				Value NODI					
				Sample	=		19 - mg/L	09/99 - See Permit	24 - COMP24
01092	Zinc, total [as Zn]	1 - Effluent Gross	0	 Permit Req.		Req Mon DAILY MX	19 - mg/L ₀	09/99 - See Permit	24 - COMP24
				Value NODI					
				Sample	<	0.006	19 - mg/L	09/99 - See Permit	24 - COMP24
01097	Antimony, total [as Sb]	1 - Effluent Gross	0	 Permit Req.		Req Mon DAILY MX	19 - mg/L ₀	09/99 - See Permit	24 - COMP24
	7			Value NODI					
				Sample	<		19 - mg/L	09/99 - See Permit	24 - COMP24
01147	Selenium, total [as Se]	1 - Effluent Gross	0	 Permit Req.		Req Mon DAILY MX	19 - mg/L ₀	09/99 - See Permit	24 - COMP24
				Value NODI					
				Sample	<	0.005	19 - mg/L	09/99 - See Permit	GR - GRAB
32730	Phenolics, total recoverable	1 - Effluent Gross	0	 Permit Req.		Req Mon DAILY MX	19 - mg/L ₀	09/99 - See Permit	GR - GRAB
	,			Value NODI					
				Sample	=		3M - ng/L	09/99 - See Permit	GR - GRAB
71900	Mercury, total [as Hg]	1 - Effluent Gross	0	 Permit Req.		Req Mon DAILY MX	3M - ng/L 0	09/99 - See Permit	GR - GRAB
	,			Value NODI					

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By
DOWNERS GROVE SANITARY DISTRICT

User: reeseberry
Name: Dorrance Berry
E-Mail: rberry@dgsd.org

Date/Time: 2023-07-06 15:39 (Time Zone: -05:00)

Report Last Signed By

User: reeseberry
Name: Dorrance Berry
E-Mail: rberry@dgsd.org

Date/Time: 2023-07-06 15:46 (Time Zone: -05:00)

Permit

Major:

IL0028380 Permit #:

Permittee:

DOWNERS GROVE SANITARY DISTRICT

2710 CURTISS STREET PO BOX 1412 **Permittee Address:**

DOWNERS GROVE, IL 60515

Facility Location:

Facility:

DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER

5003 WALNUT AVENUE

DOWNERS GROVE, IL 60515

Permitted Feature:

C01 External Outfall Discharge: C01-0

EXCESS FLOW FROM INTERMEDIATE CLARIFIER #1

Report Dates & Status

Monitoring Period: From 06/01/23 to 06/30/23 **DMR Due Date:** 07/25/23

Status: **NetDMR Validated**

Considerations for Form Completion

W0430300002; NUMBER OF DAYS OF DISCHARGE:CS

Underwood

Yes

Principal Executive Officer

First Name: Amy Title: General Manager Telephone:

630-969-0664

No Data Indicator (NODI)

Form NODI:

Last Name:

	Parameter	Monitoring Location	Season #	Param. NODI				Quantity of	or Loading					Quality or Con	centration		# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1 Q	ualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units		
					Sample														
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0		Permit Req.											Req Mon DAILY MX	19 - mg/L	DL/DS - Daily When Discharging	g GR - GRAB
	, ,,			Value NODI											C - No Discharge				
					Sample														
00530	Solids, total suspended	1 - Effluent Gross	0		Permit Req.											Req Mon DAILY MX	19 - mg/L	DL/DS - Daily When Discharging	g GR - GRAB
					Value NODI											C - No Discharge			
					Sample														
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0		Permit Req.											Req Mon DAILY MX	19 - mg/L	DL/DS - Daily When Discharging	g GR - GRAB
	, , , , , , , , , , , , , , , , , , , ,				Value NODI											C - No Discharge			
					Sample														
00665	Phosphorus, total [as P]	1 - Effluent Gross	0		Permit Req.								ı	Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L	DL/DS - Daily When Discharging	g GR - GRAB
	,				Value NODI									C - No Discharge		C - No Discharge			
					Sample														
82220	0 Flow, total 1 - Effluent Gross 0		Permit Req.			Re	eq Mon MO TOTAL	30 - Mgal/mo								DL/DS - Daily When Discharging	CN - CONTI		
	,				Value NODI			(C - No Discharge										

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

DOWNERS GROVE SANITARY DISTRICT

User: reeseberry Name: Dorrance Berry E-Mail: rberry@dgsd.org

Date/Time: 2023-07-06 15:40 (Time Zone: -05:00)

Report Last Signed By

User: reeseberry Name: Dorrance Berry E-Mail: rberry@dgsd.org

2023-07-06 15:46 (Time Zone: -05:00) Date/Time:

Permit

Permit #: IL0028380 Permittee:

DOWNERS GROVE SANITARY DISTRICT

DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER

Major:

Yes

2710 CURTISS STREET PO BOX 1412 Permittee Address:

Facility Location:

Facility:

Status:

5003 WALNUT AVENUE DOWNERS GROVE, IL 60515

Permitted Feature:

INF Influent Structure Discharge:

DMR Due Date:

Title:

INF-L INFLUENT MONITORING

DOWNERS GROVE, IL 60515

Report Dates & Status

Monitoring Period: From 06/01/23 to 06/30/23 07/25/23

NetDMR Validated

Considerations for Form Completion

W0430300002

Principal Executive Officer

First Name: Amy

Underwood

General Manager

Telephone: 630-969-0664

No Data Indicator (NODI)

Last Name:

	Parameter	Monitoring Location	Season #	Param. NODI			Qua	antity or Loa	ding					Quality or Conc	entration			# of Ex	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	2 Value 2	Qualifier 3	Value 3	Units			
					Sample								=	388.0			19 - mg/L		09/99 - See Permit	CP - COMPO
0310	BOD, 5-day, 20 deg. C	G - Raw Sewage Influent	0		Permit Req.									Req Mon MO AVG			19 - mg/L	0	09/99 - See Permit	CP - COMPOS
	- , ,				Value NODI															
					Sample								=	313.0			19 - mg/L		09/99 - See Permit	CP - COMPOS
0530	Solids, total suspended	G - Raw Sewage Influent	0		Permit Req.									Req Mon MO AVG			19 - mg/L	0	09/99 - See Permit	CP - COMPOS
					Value NODI															
					Sample											55.1	19 - mg/L		01/30 - Monthly	CP - COMPOS
0600	Nitrogen, total [as N]	G - Raw Sewage Influent	0		Permit Req.											Req Mon DAILY MX	(19 - mg/L	0	01/30 - Monthly	CP - COMPOS
					Value NODI															
					Sample										=	9.37	19 - mg/L		04/30 - Four Per Month	CP - COMPOS
0665	Phosphorus, total [as P]	G - Raw Sewage Influent	0		Permit Req.											Req Mon DAILY MX	(19 - mg/L	0	01/30 - Monthly	CP - COMPOS
	. ,				Value NODI															
					Sample	= 6.	27	= !	9.44	03 - MGD									99/99 - Continuous	
0050	Flow, in conduit or thru treatment plant	G - Raw Sewage Influent	0		Permit Req.	Re	eq Mon MO AVG		Req Mon DAILY MX	03 - MGD								0	99/99 - Continuous	
	,	l limit of mage minuting			Value NODI													_		

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

DOWNERS GROVE SANITARY DISTRICT

User: reeseberry Name: Dorrance Berry E-Mail: rberry@dgsd.org

Date/Time: 2023-07-06 15:41 (Time Zone: -05:00)

Report Last Signed By

User: reeseberry Name: Dorrance Berry E-Mail: rberry@dgsd.org

2023-07-06 15:46 (Time Zone: -05:00) Date/Time:

DMR Copy of Record Permit Facility: IL0028380 Permittee: DOWNERS GROVE SANITARY DISTRICT DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER Permit #: Permittee Address: 2710 CURTISS STREET PO BOX 1412 Facility Location: **5003 WALNUT AVENUE** Major: Yes DOWNERS GROVE, IL 60515 DOWNERS GROVE, IL 60515 INFL Discharge: INFL-S Permitted Feature: Influent Structure SEMI ANNUAL SAMPLING AT INFL Report Dates & Status **DMR Due Date:** Status: Monitoring Period: From 03/01/23 to 06/30/23 07/25/23 **NetDMR Validated Considerations for Form Completion** W0430300002 **Principal Executive Officer** First Name: Title: General Manager Telephone: 630-969-0664 Last Name: Underwood No Data Indicator (NODI) Form NODI: Monitoring Location Season # Param. NODI Quantity or Loading **Quality or Concentration** # of Ex. Frequency of Analysis Sample Type Parameter Qualifier 1 Value 1 Qualifier 2 Value 2 Units Qualifier 1 Value 1 Qualifier 2 Value 2 Qualifier 3 Value 3 Units GR - GRAB Sample 19 - mg/L 09/99 - See Permit Req Mon DAILY MX 19 - mg/L 0 GR - GRAB 09/99 - See Permit Permit Req. 00556 Oil & Grease 1 - Effluent Gross 0 Value NODI Sample 28 - ug/L 09/99 - See Permit GR - GRAB 5.0 Req Mon DAILY MX 28 - ug/L 0 Permit Req. 09/99 - See Permit GR - GRAB 00718 Cyanide, weak acid, dissociable 1 - Effluent Gross 0 Value NODI

				Sample		<	5.0	28 - ug/L		09/99 - See Permit	GR - GRAB
00720	Cyanide, total [as CN]	1 - Effluent Gross	0	 Permit Req.			Req Mon DAILY	MX 28 - ug/L	0	09/99 - See Permit	GR - GRAB
				Value NODI							
				Sample		=	0.61	19 - mg/L		09/99 - See Permit	24 - COMP24
00951	Fluoride, total [as F]	1 - Effluent Gross	0	 Permit Req.			Req Mon DAILY	MX 19 - mg/L	0	09/99 - See Permit	24 - COMP24
00001		1 Emdent Gross		Value NODI					Ü		
				Sample		<	0.01	19 - mg/L		09/99 - See Permit	24 - COMP24
01002	Arsenic, total [as As]	1 - Effluent Gross	0	 Permit Req.			Req Mon DAILY	MX 19 - mg/L	0	09/99 - See Permit	24 - COMP24
				Value NODI							
				Sample		=	0.067	19 - mg/L		09/99 - See Permit	24 - COMP2
01007	Barium, total [as Ba]	1 - Effluent Gross	0	 Permit Req.			Req Mon DAILY	MX 19 - mg/L	0	09/99 - See Permit	24 - COMP2
0.00.				Value NODI							
				Sample		<	0.004	19 - mg/L		09/99 - See Permit	24 - COMP2
01012	Beryllium, total [as Be]	1 - Effluent Gross	0	 Permit Req.			Req Mon DAILY	MX 19 - mg/L	0	09/99 - See Permit	24 - COMP2
				Value NODI							
				Sample		<	0.001	19 - mg/L		09/99 - See Permit	24 - COMP2
01027	Cadmium, total [as Cd]	1 - Effluent Gross	0	 Permit Req.			Req Mon DAILY	MX 19 - mg/L	0	09/99 - See Permit	24 - COMP2
				Value NODI							
				Sample		<	0.005	19 - mg/L		09/99 - See Permit	GR - GRAB
01032	Chromium, hexavalent [as Cr]	1 - Effluent Gross	0	 Permit Req.			Req Mon DAILY	MX 19 - mg/L	0	09/99 - See Permit	GR - GRAB
	, , , , , , , , , , , , , , , , , , , ,			Value NODI							
				Sample		<	0.005	19 - mg/L		09/99 - See Permit	24 - COMP2
01034	Chromium, total [as Cr]	1 - Effluent Gross	0	 Permit Req.			Req Mon DAILY	MX 19 - mg/L	0	09/99 - See Permit	24 - COMP2
	,			Value NODI							
				Sample		=	0.099	19 - mg/L		09/99 - See Permit	24 - COMP2
01042	Copper, total [as Cu]	1 - Effluent Gross	0	 Permit Req.			Req Mon DAILY	MX 19 - mg/L	0	09/99 - See Permit	24 - COMP2
0.0.2	ooppoi, ioiai [ao oa]			Value NODI							
				Sample		=	1.69	19 - mg/L		09/99 - See Permit	24 - COMP2
01045	Iron, total [as Fe]	1 - Effluent Gross	0	 Permit Req.			Req Mon DAILY	MX 19 - mg/L	0	09/99 - See Permit	24 - COMP2
				Value NODI							
				Sample		=	0.34	19 - mg/L		09/99 - See Permit	24 - COMP2
01046	Iron, dissolved [as Fe]	1 - Effluent Gross	0	 Permit Req.			Req Mon DAILY	MX 19 - mg/L	0	09/99 - See Permit	24 - COMP2
0.0.0		22 21000		Value NODI							

					Sample	<	0.005	19 - mg/L	09/99 - See Permit	24 - COMP24
01051	Lead, total [as Pb]	1 - Effluent Gross	0		Permit Req.		Req Mon DAILY MX	19 - mg/L	09/99 - See Permit	24 - COMP24
01001	Lead, total [as I s]	1 Emdent Gross			Value NODI					
					Sample	=	0.083	19 - mg/L	09/99 - See Permit	24 - COMP24
01055	Manganese, total [as Mn]	1 - Effluent Gross	0		Permit Req.		Req Mon DAILY MX	19 - mg/L	09/99 - See Permit	24 - COMP24
0.000	manganoso, total [ao mm]	1 Emaoni Groos			Value NODI					
					Sample	<	0.01	19 - mg/L	09/99 - See Permit	24 - COMP24
01059	Thallium, total [as TI]	1 - Effluent Gross	0		Permit Req.		Req Mon DAILY MX	19 - mg/L	09/99 - See Permit	24 - COMP24
0.000		. Lindon Gross			Value NODI					
					Sample	=	0.008	19 - mg/L	09/99 - See Permit	24 - COMP24
01067	Nickel, total [as Ni]	1 - Effluent Gross	0		Permit Req.		Req Mon DAILY MX	19 - mg/L	09/99 - See Permit	24 - COMP24
0.007	Thomas, total [do rti]	1 Emaoni Groos			Value NODI					
					Sample	<	0.003	19 - mg/L	09/99 - See Permit	24 - COMP24
01077	Silver, total [as Ag]	1 - Effluent Gross	0		Permit Req.		Req Mon DAILY MX	19 - mg/L	09/99 - See Permit	24 - COMP24
01077	oliver, total [as Ag]	1 Emdent Gross			Value NODI					
					Sample	=	0.131	19 - mg/L	09/99 - See Permit	24 - COMP24
01092	Zinc, total [as Zn]	1 - Effluent Gross	0		Permit Req.		Req Mon DAILY MX	19 - mg/L	09/99 - See Permit	24 - COMP24
					Value NODI					
					Sample	<	0.006	19 - mg/L	09/99 - See Permit	24 - COMP24
01097	Antimony, total [as Sb]	1 - Effluent Gross	0		Permit Req.		Req Mon DAILY MX	19 - mg/L	09/99 - See Permit	24 - COMP24
	, and the same and				Value NODI					
					Sample	<		19 - mg/L	09/99 - See Permit	24 - COMP24
01147	Selenium, total [as Se]	1 - Effluent Gross	0		Permit Req.		Req Mon DAILY MX	19 - mg/L	09/99 - See Permit	24 - COMP24
					Value NODI					
					Sample	=	0.033	19 - mg/L	09/99 - See Permit	GR - GRAB
32730	Phenolics, total recoverable	1 - Effluent Gross	0		Permit Req.		Req Mon DAILY MX	19 - mg/L	09/99 - See Permit	GR - GRAB
					Value NODI					
					Sample	<		3M - ng/L	09/99 - See Permit	GR - GRAB
71900	Mercury, total [as Hg]	1 - Effluent Gross	0		Permit Req.		Req Mon DAILY MX	3M - ng/L	09/99 - See Permit	GR - GRAB
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Value NODI					

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

DOWNERS GROVE SANITARY DISTRICT

User: reeseberry
Name: Dorrance Berry
E-Mail: rberry@dgsd.org

Date/Time: 2023-07-06 15:46 (Time Zone: -05:00)

Report Last Signed By

User: reeseberry
Name: Dorrance Berry
E-Mail: rberry@dgsd.org

Date/Time: 2023-07-06 15:46 (Time Zone: -05:00)

DOWNERS GROVE SANITARY DISTRICT

M E M O

TO: Amy Underwood, General Manager

FROM: Nick Whitefleet, Lead Mechanic

DATE: July 07, 2023

SUBJECT: June 2023 Maintenance Report

Attached is a work order summary detailing equipment repair and preventive maintenance activities conducted by the maintenance/electrical department during June 2023.

Special projects in June included:

Grit Basement & Raw Sewage Tunnel Piping insulation

Multiple sections of copper water piping in the grit basement and grit to raw-sewage tunnel had missing or damaged insulation. These sections are part of the FY 23-24 painting contract so in anticipation of the fresh coat of paint, District staff made the required repairs. Porter Pipe was the main source for the insulation materials used for this project.

WWTC Window Replacement

As mentioned last month, the Maintenance Services building lunchroom was identified and budgeted for three (3) large windows to be replaced. Multiple vendors submitted proposals for these projects, and the District selected Willow Ridge Glass & Mirror to perform the work. The MSB lunchroom window replacement included the addition of an exterior door which allows access to our paved patio / gazebo area directly from the lunchroom. The window installation is complete and District staff is performing the installation of new trim on the interior of the new windows.



CHP System – Units 1&2 Operation Update

CHP 1: Operated as expected through the month of June after the repairs performed by Nissen.

CHP 2: The portion of wiring harness causing the oil pressure alarms has been replaced. The engine was put back into service and is performing as expected.

CHP System Cont'd

The total cost for the repairs relating to the possible gas contamination is not known. Nissen has indicated the CHP 1 repairs will be covered under warranty, but this is yet to be confirmed. To date, the District has not been invoiced for any of the repairs performed by Nissen on either of the engines over the last few months. Once received, we will review and negotiate (if necessary) to achieve a fair and appropriate outcome for the District related to the expenses.

Lift Stations

It was determined that due to its remote location, Northwest lift station should be outfitted with multiple signs to identify the station as well as to direct visitors to its location. This helps both vendors as well as first responders to better locate the lift station. An existing UIC sign was outfitted with address labeling after the District contacted them for approval. In addition to that, four (4) additional signs were installed between Finley Road and the lift station. This project is complete.

Procurements:

Rotork actuator \$5,278 from L.A.I. for stock due to primary clarifier 1 valve 2 actuator failing.

Shaft seal \$5,086 from John Crane for Worthington Raw Sewage Pump 8.

Two (2) security cameras, mounting kits and licenses \$2,870 from Sound Incorporated for Administration Center exterior.

cc: WDVB, AES, JMW, KJR, RTJ, MJS, CS, DM

Work Order Summary

Work Order Completion Dates from 6/1/2023 to 6/29/2023

Work Assignment	Completion Date	Equipment	NOTATIONS
6000 Hour Oil Change on Unison Gas Skid Blower	01-Jun-23	CHP Gas Cleaning System	
Troubleshoot Munters failure.	02-Jun-23	Filter Building	
Replace West birdcage.		Venard Lift Station	Removed and replaced West wet well birdcage with new. 70' long cable required for this location.
Replaced South facing windows (3) and frame with new	05-Jun-23	Bar Screen Building	Willow Ridge Glass removed and replaced the South facing windows and frames and replaced with new.
Fabricate funnel for media replacement of H2S vessel. 6 Month Megger Of Submersible Pumps		CHP Gas Cleaning System College Pump 1	Designed and fabricated funnel for top port on vessel.
Tumps		College Pump 2	
		College Pump 3	
		Earlston Pump 3	
		Liberty Park LS Pump 1	
		Liberty Park LS Pump 2	
		Liberty Park LS Pump 3	
		Venard Pump #1	
		Venard Pump #2	
		Venard Pump #3	
Perform 700 hour oil change and oil filter change.	06-Jun-23	CHP Engine Genset #1	Took oil sample (IND-66442) and sent out to lab for analysis. Changed oil and (2) oil filters.
Leak at cleaning discharge pipe.		Hypochlorite OSEC Generator	Replaced leaking valve with new valve and piping.
Replace UPS Batteries at Operations Center server (SV1)		SCADA	Replaced WWTC server UPS battery.
Minor PM performed by Delta industries. (Quarterly)	08-Jun-23	Maintenance Services Building WWTC ODS Pump Air Compressor	Replaced oil filter, air filter and filter mats. Oil cooler and condenser coil. Took oil sample and updated software.
Procure maintenance repair parts for both engines.	09-Jun-23	CHP Engine Genset #1	
		CHP Engine Genset #2	
Check STR 700, 721, 741, clean as needed.	12-Jun-23	CHP Gas Cleaning System	
MONTHLY EXERCISE OF ALL HEAT EXCHANGERS- GAS MODE		Digester 1 Heat Exchanger	
		Digester 2 Heat Exchanger	
		Digester 3 Heat Exchanger	
		Digester 4 Heat Exchanger	
		Digester 5 Heat Exchanger	
Monthly Liquid Status of Under Ground Diesel Tank		Emerg Gen Diesel Storage Tank	
Run And Inspect Generators With		Emergency Generator 1	

Thursday, July 13, 2023 Page 1 of 5

Work Assignment	Completion Date	Equipment	NOTATIONS
The Load Of The Plant			
		Emergency Generator 2	
		Emergency Generator 3	
EXCESS 003- Exercise 30" and 24" DEZURIK Valves		Excess Flow 003 Valves	
Exercising of Raw and Excess Influent valves		Excess Flow Pump Station	
Six Month Oil Change Sand Filter's #1 & #2		Filter 1	
		Filter 2	
Grease fittings on munters unit		Filter Building	
3 Month Oil Change On Int. Draw- off Valves compressor		Interm Clarifier Sludge Bldg	
2000 Hour Grease of Plant Effluent Pumps		Plant Effluent Water Pump #2	
Exercising of Raw and Excess Influent valves		Raw Sewage Pump Station	
Exercising of secondaries 1 and 2 influent gates		Secondary Clarifier 1	
-		Secondary Clarifier 2	
SEASONAL ON/OFF FOR SPRAY WATER - SEC. 6-9		Secondary Clarifier 6	
		Secondary Clarifier 7	
		Secondary Clarifier 8	
		Secondary Clarifier 9	
Exercise both 24" primary influent ratio valves		Tunnel From PS to Grit	
		Tunnel/Chan Primary Clarifiers	
Test and replace all burned out indication bulbs on plant equipment	13-Jun-23	3 Bar Screen Building	
		Belt Filter Press Building	
		Bisulfite Building	
		Blower Building	
		Digester 1 and 2 Control Bldg	
Oil Bell & Gosset Pumps		Digester 1 Heat Exchanger	
		Digester 2 Heat Exchanger	
Test and replace all burned out indication bulbs on plant equipment		Digester 3 Control Building	
Oil Bell & Gosset Pumps		Digester 3 Heat Exchanger	
Test and replace all burned out indication bulbs on plant equipment		Digester 4 - 5 Control Buildg	
Oil Bell & Gosset Pumps		Digester 4 Heat Exchanger	
		Digester 5 Heat Exchanger	
Test and replace all burned out		Emergency Generator	
Thursday, July 13, 2023			Page 2 of

Work Assignment	Completion Date	Equipment	NOTATIONS
indication bulbs on plant		Building	
equipment		Evenes Flow Dump	
		Excess Flow Pump Station	
		Excess Flow Sludge	
		Pump House Filter Building	
		Grit Building	
		Hypochlorite Feed Blg	
		Interm Clarifier Sludge Bldg	
		Microstrainer Building	
		Operations Center	
		Raw Sewage Pump Station	
Monthly Fire Extinguishers Inspection	14-Jun-23	5006 Walnut Eqpmnt Strge Bldg	
mspection		Administration Center	
		Bar Screen Building	
		Belt Filter Press Building	
		Bisulfite Building	
		Blower Building	
EXERCISE SLUICE GATES- WITH DRILL		Channel Aeration Tank 8-11 ML	
2 MONTH EXERCISE OF W.A.S. MOYNO PUMPS 1 AND 3		Conc Tank Moyno Sludge Pump 1	
		Conc Tank Moyno Sludge Pump 3	
Monthly Fire Extinguishers Inspection		Digester 1 and 2 Control Bldg	
		Digester 3 Control Building	
		Digester 4 - 5 Control Buildg	
		Emergency Generator Building	
Exercise Of EBARA and Excess Pumps		Excess Flow Pump 06	
		Excess Flow Pump 07	
		Excess Flow Pump 08	
		Excess Flow Pump 09	
		Excess Flow Pump 10	
		Excess Flow Pump 11	
Mandala Eine End' 1		Excess Flow Pump 12	
Monthly Fire Extinguishers Inspection		Excess Flow Pump Station	
		Excess Flow Sludge Pump House	
		Filter Building	
		Grit Building	

Thursday, July 13, 2023 Page 3 of 5

Work Assignment	Completion Date	Equipment	NOTATIONS
		Hypochlorite Feed Blg	
		Interm Clarifier Sludge Bldg	
EXERCISE SLUICE GATES- WITH DRILL		Intermediate Clarifier 2	
		Intermediate Clarifier 3	
Monthly Fire Extinguishers Inspection		Laboratory	
		Maintenance Services Building	
		Microstrainer Building	
		Operations Center	
		Raw Sewage Pump Station	
EXERCISE SLUICE GATES- WITH DRILL		Secondary Clarifier 8	
		Secondary Clarifier 9	
Monthly Fire Extinguishers Inspection		System Garage	
Repair pipe insulation, pipe clamps & hangers		Tunnel From PS to Grit	Removed and replaced existing insulation on "city water" lines throughout. Installed new where missing. Replace existing pipe clamps and hangers with new dielectric fittings.
Flush Pearth 2 with 3 oz of Kerosene/Oil mixture	15-Jun-23	3 Digester 2 Mixing System	•
Procure spare blower for Unison gas cleaning skid. Six Month Oil Change Primaries 1	16-Jun-23	3 CHP Gas Cleaning System Primary Clarifier 1	Ordered additional Howden Roots blower for gas skid.
& 2 Long Collector		•	
		Primary Clarifier 2	
Replace stuck sludge inlet valve with new.	19-Jun-23	3 Digester 4 Heat Exchanger	Replaced sludge inlet valve with new from stock. Ordered valve for stock. Verified no build-up on sludge tubes (internal).
Replace drive shaft due to worn out splines on yoke.	20-Jun-23	3 2015 Wheel Loader #332	Ordered new drive shaft assembly. Removed and replaced existing drive shaft with new.
16,872 hours. Perform 1200 hour maintenance on engine genset.	21-Jun-23	3 CHP Engine Genset #1	Performed all aspects of a 1,200 hour maintenance.
By-Weekly Fluid and Misc. Check of Generators		Emergency Generator 1	
		Emergency Generator 2	
		Emergency Generator 3	
Safety lane Vehicle 317	22-Jun-23	3 2009 Sterling LT 7500	
Repaint radiant heat covers to match new cove base.		Administration Center	Procured paint to match new cove base. Removed, painted and reinstalled radiant heat grill assemblies in vestibule.
Procure maintenance repair parts for both engines.		CHP Engine Genset #1	
EXERCISING OF EXCESS RAW SEWAGE VALVING		Excess Flow Pump 06	
		Excess Flow Pump 07	
		Excess Flow Pump 08	
		Excess Flow Pump 09	
Replace windows in MSB lunchroom.		Maintenance Services Building	Willow Ridge Glass removed and replaced the three windows & frames in the lunchroom. Hill's Concrete Cutting cut foundation for the addition of an access door.
Thursday July 13, 2023			Page 4 of 5

Thursday, July 13, 2023 Page 4 of 5

Work Assignment	Completion Date	Equipment	NOTATIONS
Replace turbo charger with new due to leaking oil seals.	23-Jun-23	Portable Generator 350	Replaced turbo charger with new. Returned old unit for core, and picked up spare maintenance parts. Test ran generator under load, OK.
Fix hydraulic motor	26-Jun-23	3 2004 AUGER-DAWG G- 30 4D087	Diagnose defective seal on hydraulic motor Auger #2. Replaced motor.
Lubricate skid steer and attachment mechanisim		2019 Skid Steer	
Clean Office Roof Of All Debris		Administration Center	
Replace broken castor on rag dumpster.		Bar Screen Rag Compactor	Replaced castor with new from stock. Ordered replacement for stock.
Quartely Flow Test In Maintenance Garage		Maintenance Services Building	
Diagnose and repair hydraulic coupler	27-Jun-23	3 2019 AUGER DAWG G- 30 3F052	Diagnose and replace hydraulic coupler. Removed splined hub, cleaned,inspected and replaced.
Village Hall PLC Power Failure.		SCADA	Replace UPS with smaller one to fit inside cabinet without tripping power supply breaker. Concentric made changes to alarm programming.
Replace splined hub on Auger #3	28-Jun-23	3 2004 AUGER-DAWG G- 30 4D088	Auger is slipping, found splined hub stripped. Replaced splined hub.
Exercise valves at Belt Press Building	29-Jun-23	Belt Filter Press	
		Belt Filter Press Building	
		Belt Press Feed Sludge Pits	
		Belt Press Polymer Mix System	
		Belt Press Sludge Conveyor	
		Belt Press Sludge Feed Pump 1	
		Belt Press Washwater System	
Test for H2S at Unison Gas skid		CHP Gas Cleaning System	Raw Gas- 400 PPM, H2S Vessel- 0 PPM
6 Month Oil Change On Bearings on Grit Pumps 1, 2, 3, & 4.		Grit Pump 1	
		Grit Pump 2	
		Grit Pump 3	
		Grit Pump 4	

Thursday, July 13, 2023 Page 5 of 5

DOWNERS GROVE SANITARY DISTRICT MEMO

DATE: July 11, 2023

Amy Underwood General Manager TO:

FROM: Robert Swirsky Sewer System Maintenance Supervisor

RE:	Monthly Report – June 2023		
1.	JULIE Line Markings: Received In District Marked Man Hours	Current 1892 1776 396 95	Year to Date 7229 6864 1517 532
2.	Building Service: a. BSSRAP TV Inspections b. Emergency BSSRAP Repairs c. Total BSSRAP Repairs d. I&I inspections e. I&I C.O. installation f. Replace broken cleanout caps g. OHSP TV Inspections h. Post Rodding TV	Current 18 09 17 14 00 00 00 05	Year to Date 113 66 93 16 02 00 00 31
3.	Sewer backups: a. Public sewer b. Private sewer c. Surcharged main d. Pump station Total	Current 00 12 00 00 12 12 Current	Year to Date 03 128 00 00 131 Year to Date
4.	Sewer Cleaning (DGSD personnel): a. Sewer Cleaning (outside contractors):	41,744 0	178,841 Ft. 0 Ft.
5.	Main Sewer Televising (DGSD personnel) a. Sewer Televising (outside contractors):	: 0	2,604 Ft. 0 Ft.
6.	LETS TV	0	0
7.	Manhole inspections	00	32

- 8. Sewer and manhole repairs and replacements by Uno Construction:
- 9. Miscellaneous: (sewer system personnel)
 - a.
 - Upload Flow-Meters. Assist at WWTC with gas filter media removal. b.

CC: WDVB, AES, JMW, KJR, RTJ, MJS, DM

DOWNERS GROVE SANITARY DISTRICT M E M O

DATE: July 9, 2023

TO: Amy R. Underwood

General Manager

FROM: Keith Shaffner

Sewer Construction Supervisor

RE: Monthly Report: Sewer Construction \ Code Enforcement – June 2023

1.	Permits issued:	Current	Year to Date
	a. Single family	4	25
	b. Multiple family	0	0
	c. Commercial	2	7
	d. Repair	1	5
	e. Disconnection	<u>3</u>	<u>9</u>
	Total	$1\overline{0}$	$4\overline{6}$
2.	Inspections made:	Current	Year to Date

ms	pections made:	Current	rear to Dat
a.	Connections	11	54
b.	Finals	2	21
c.	Repairs	0	4
d.	Disconnects	1	16
e.	Groundwork	0	0
f.	Walk-Thru	0	0
g.	Pre-connections	1	2
h.	Overhead Sewer Program	0	0
i.	Code Enforcement	0	4
j.	Lateral testing	<u>4</u>	<u>27</u>
	Total	19	128

3. New Sewer Extension Construction:

None

4. New Sewer Extension Testing - air, deflection, manhole, and televising:

None

5. Code Enforcement:

None

6. Plan & Permit Reviews:

- a. 4915 Main Multi Family Review
- b. 5126 Main Commercial Review
- c. 426 Lincoln Single Family Home Review
- d. 1234 Arnold Single Family Home Review
- e. 2539 Ogden Commercial Review
- f. 4838 Douglas Single Family Home Review
- g. 202 Roslyn Single Family Home Review
- h. 946 Summit Sanitary Service Repair Review

7. Building Sanitary Service Access Agreements:

- a. 1225 Arnold Downers Grove
- b. 4812 Lee Downers Grove
- c. 621 Ogden Downers Grove
- 8. Illinois EPA Permits:

None

9. Miscellaneous:

- a. The Village of Westmont's contractor has started the CBD Alley H Restoration project. As part of this project, they will be replacing approximately 1000 feet of sanitary sewer main in the west Cass alley. DGSD Inspectors have been on site with the contractor inspecting the sewer construction.
- b. DGSD Inspectors have been continually inspecting sanitary manhole adjustments for paving projects and the repairs of sanitary services during Village utility improvements.

CC: WDVB, AES, JMW, KJR, RTJ, MJS, RPS & DM

Permits Issued: JUNE 2023

YEAR	PERMIT #	ADDRESS	STREET	CITY	ISSUE	TYPE	TAP FEE	INSP FEE
2023	33	1225	ARNOLD	DG	6/1/2023	SF	\$3,762.50	\$260.00
2023	37	4812	LEE	DG	6/2/2023	SF-RB		\$260.00
2023	38	5126	MAIN	DG	6/2/2023	COM	\$7,525.00	\$249.00
2023	20	621	OGDEN	DG	6/6/2023	COM		\$431.00
2023	41	946	SUMMIT	DG	6/9/2023	REPAIR		
2023	43	426	LINCOLN	DG	6/13/2023	DISCON		
2023	40	21 N	LINCOLN	W	6/14/2023	DISCON		
2023	35	310 W	60TH	DG	6/19/2023	SF	\$3,762.50	\$260.00
2023	44	426	LINCOLN	DG	6/26/2023	SF-RB		\$260.00
2023	48	4636	PRINCE	DG	6/30/2023	DISCON		
					TOTAL:		\$15,050.00	\$1,720.00

Permit Final Inspections: JUNE 2023

YEAR	PERMIT #	ADDRESS		STREET	CITY	<u>FINAL</u>
2021	108	350	N	GRANT	W	7/14/2023
2021	126	6031		MARGO	DG	7/16/2023

Progress Report

To: Amy Underwood, General Manager From: Reese Berry, Laboratory Supervisor

Date: July 7, 2023

Re: June 2023 Laboratory Report

DGSD had zero excess flow sampling events during June 2023. We had no permit excursions in June.

Pretreatment:

We sent out an Industrial Waste Survey (IWS) to users during May and are currently collecting and following up on any surveys returned to us. We've received nearly 60% of the surveys back from the initial mailing. We will be following up with unaccounted for surveys during the month of July.

We had USEPA onsite to review our pretreatment program and evaluate how we operate the program. They were at DGSD June 27th -29th. We expect to hear feedback and recommendations from them within the next few months.

We do anticipate some changes to our program, to update various aspects of how the program operates and how we perform specific tasks within the framework of the program.

Surcharge:

We have evaluated the region and sampling locations for this year. We like to sample during the month of June, but due to the USEPA visit I felt it would be best to delay sampling until after their onsite inspection was completed. We will begin Surcharge sampling in July.

Training:

We are going to start an online training program for microbiology in wastewater treatment. Stephanie Cioni is going to perform this training first, to see if it is something that can help staff. The course will help foresee operational issues before they actually happen in the plant treatment process.

To: Board of Trustees From: Amy Underwood

Re: Engineering Report for the Month June 2023

Date: July 14, 2023

I. Planning Projects & Studies

A. Biosolids Processing Improvements

Huber will be at the WWTC the week of July 31 to demonstrate their dewatering press.

The heat exchanger capacity for Digester 4 is under review. Since accepting hauled grease waste in Digester 4, staff have had to use the heat exchanger for Digester 5 in the winter to provide heat for Digester 4 as the Digester 4 heat exchanger was not sufficient to maintain the digester's temperature.

B. WWTC & Lift Station Code Walk-Through

The District is in the process of doing a final review of the report.

C. Butterfield Lift Station Study

Baxter & Woodman is analyzing the full replacement of the Butterfield Lift Station which is nearing its useful life.

II. Design Projects

A. Curtiss Street Sewer Lining

EPA reviewed the project documents to verify that the grant requirements were included. The project advertised for bids on July 13. Due to the grant procurement requirements, this project will have a long bid period. Bids will be opened on September 6.

B. Venard Forcemain Replacement

Baxter & Woodman (B&W) has been working on the design.

C. Basin 2D Sewer Lining

Bids were opened on July 13. Staff will recommend at the July 18 Board meeting that the project be awarded to Visu-Sewer.

D. Underground Diesel Storage Tank Replacement

Baxter & Woodman is working on bid documents to replace this tank.

III. Construction Projects

A. Centex Lift Station Replacement

Berger Excavating Contractors, Inc. did not submit a payment request this month.

The generator and control panel have been set in place.



B. Outfall 001 Sanitary Sewer Repair

Archon Construction has ordered the sewer pipe and anticipates replacing the sagged section of sewer in mid-September.

C. Administration Building Improvements

YAD Construction has completed most of the work. They are currently working on corrections required by the building inspector.

D. 2023 Painting Services

The work is expected to start soon.

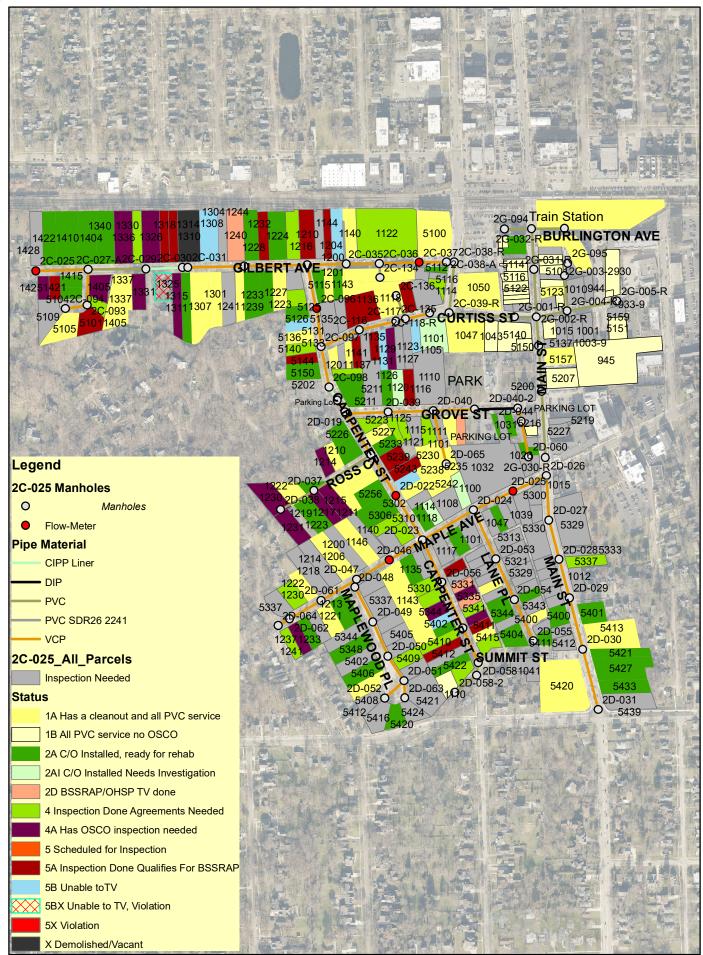
E. SCADA Platform Replacement (Ignition)

Concentric has started work on the SCADA platform replacement.

C: BOT, BOLI, CS, DM



2C-025 I&I Investigation Status



STATUS OF PARCELS 2C-025 I&I INVESTIGATION

Category	Inspections Scheduled	Inspections Completed	Application Received	Agreements Signed	Cleanout	Service Rehab Done	Totals	Total as Percentage
1A	Υ	Y	N	Υ	Y	N/A	47	15%
1B	Υ	Υ	N	N	N	N/A	27	9%
2A	Υ	Υ	Υ	Υ	Υ	N	56	18%
2AI	Υ	Υ	Υ	Υ	Υ	N	4	1%
2B	Υ	Υ	Υ	Υ	Υ	N	0	0%
2D	Υ	Υ	Υ	N	N	N	4	1%
4	Υ	Υ	N	N	N	N	25	8%
4A	N	N	N	N	N/A	N	16	5%
5	Υ	N	N	N	N	N	0	0%
5A	Υ	Υ	N	N	N	N	18	6%
5AX	Υ	Υ	N	N	N	N	0	0%
5B	Υ	N	N	N	N	N	8	3%
5BX	Υ	N	N	N	N	N	1	0%
0	N	N	N	N	N	N	102	33%
X	-	-	-	-	-	-	0	0%
5X	-	-	-	-	-	-	1	0%
							309	100%

Category Description:

1A - PVC service with cleanout

1B - All PVC no Cleanout

2A - Cleanout installed, ready for rehab

2AI C/O Installed Needs Investigation

2B - Ready for rehab

3 - Program application received (executed agreements needed)

3A - Released to contractor for cleanout installation

4 - Inspection completed (Program application needed)

4A - Has an existing cleanout

5 - Inspections scheduled

5A - Inspection done - BSSRAP needed (qualifying defects or obstructions seen during TV)

5AX - Violation, BSSRAP needed

5B - Unable to TV

5BX - Unable to TV Violation

0 - Inspection Needed

X2 - Vacant not Disconnected

24% Complete

2022 Basin I&I Ranking = 9

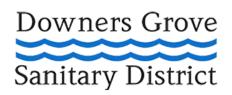
DOWNERS GROVE SANITARY DISTRICT CASH BALANCES AND INVESTMENT SCHEDULE DATE 6/30/2023

DATE 6/30/2023						PREVIOUS MONTH				
CASH BALANCES				-	TOTAL BALANCE	PREVIOUS MONTH				
07.011 27.127.11020			BALANCE PER		PER BANK	MONTHLY	EARNINGS CREDIT			
ACCOUNT NAME	ACCOUNT NUMBER	R B	ANK STATEMENT		STATEMENTS	EARNINGS CREDIT	PERCENTAGE			
DEPOSIT DISBURSEMENT FLEXIBLE BENEFITS PAYROLL PETTY CASH USER REFUNDS	XXXXXXXXX1116 XXXXXXXXX1111 XXXXXXXXX6025 XXXXXXXXX1117 XXXXXXXXXX1112 XXXXXXXXXX		\$1,249,617.10 362,400.84 20,344.05 218,771.73 5,680.00 5,628.39							
TOTAL - CASH AT BANK			\$1,862,442.11		\$1,928,016.79	\$2,148.06	0.1114%			
INVESTMENTS TYPE FINANCIAL INSTITUTION	TERM	MATURITY	AMOUNT	ANNUAL INT. RATE	GENERAL CORPORATE FUND (01)	IMPROVEMENT FUND (02)	CONSTRUCTION FUND (03)	PUBLIC BENEFIT FUND (05)	SEWER EXTENSION FUND (71)	INTEREST EARNED AT MATURITY
CD TRISTATE CAPITAL BANK	ONGOING	8/9/2023	\$250,000.00	3.290%			\$250,000.00			\$8,225.00
CD EVERGREEN BANK GROUP	ONGOING	2/24/2024	\$252,911.23	4.700%	\$252,911.23					\$11,886.83
CD STEARNS BANK	ONGOING	4/12/2024	\$250,000.00	5.000%	\$250,000.00					\$12,500.00
TOTAL CDs			\$752,911.23	4.331%	\$502,911.23	\$0.00	\$250,000.00	\$0.00	\$0.00	\$32,611.83
TYPE FINANCIAL INSTITUTION	TERM	LAST ACTION DATE	AMOUNT*	CURRENT RATE OF RETURN						ESTIMATED ANNUAL RETURN
MM AXOS BANK	ONGOING	10/30/2020	\$250,381.72	0.200%	\$250,381.72					\$500.76
MM BANKFINANCIAL	ONGOING	6/21/2023	\$252,662.23	4.880%	\$252,662.23					\$12,329.92
MM LISLE SAVINGS BANK	ONGOING	11/10/2020	\$250,009.92	1.250%	\$250,009.92					\$3,125.12
MM LUANA SAVINGS BANK	ONGOING	10/29/2020	\$255,752.88	3.100%	\$255,752.88					\$7,928.34
MM PEOPLES BANK	ONGOING	12/4/2012	\$372.78	0.000%	\$372.78					\$0.00
MM TRISTATE CAPITAL BANK	ONGOING	4/16/2021	\$11.91	2.060%			\$11.91			\$0.25
MM OLD SECOND NATIONAL BANK	ONGOING	11/20/2012	\$5,146.99	0.100%			\$5,146.99			\$5.15
TOTAL MM ACCOUNTS			\$1,014,338.43	2.355%	\$1,009,179.53	\$0.00	\$5,158.90	\$0.00	\$0.00	\$23,889.54
ILLINOIS FUNDS - MONEY MARKET			\$6,902,379.82	5.184%	\$4,945,345.14	\$883,398.29	\$1,073,636.39	\$0.00	\$0.00	\$357,819.37
TOTAL - ALL INVESTMENTS			\$8,669,629.48	4.779%	\$6,457,435.90	\$883,398.29	\$1,328,795.29	\$0.00	\$0.00	\$414,320.73

TOTAL CASH AND INVESTMENTS \$10,532,071.59

^{*}INVESTMENT ACCOUNT BALANCES ARE UPDATED QUARTERLY FOR THESE MONEY MARKET ACCOUNTS TO REFLECT NOMINAL INTEREST AMOUNTS EARNED EACH MONTH AND POSTED DIRECTLY TO THE INVESTMENT.

Board of Trustees Wallace D. Van Buren President Amy E. Sejnost Vice President Jeremy M. Wang Clerk



General Manager Amy R. Underwood, P.E.

Legal CounselDaniel McCormick, P.C.

2710 Curtiss Street P.O. Box 1412 Downers Grove, IL 60515-0703 Phone: 630-969-0664 Fax: 630-969-0827 www.dgsd.org

Providing a Better Environment for South Central DuPage County

MEMORANDUM

To: Board of Trustees

From: Amy R. Underwood, General Manager

Date: July 14, 2023

Subject: Treasurer's Report for June 2023

Attached please find the subject report that tracks income and expenses for the two months of Fiscal Year 23-24.

Totals of expenses and income are shown on the following table:

Year-to-date	Income	Expenses
General Fund	\$ 2,385,427.59 (page 1)	\$ 1,817,450.39 (page 6)
Improvement Fund	\$ 2,737.64 (page 7)	\$ 5,925.69 (page 7)
Construction Fund	\$ 35,148.69 (page 8)	\$ 0.00 (page 9)
Public Benefit Fund	\$ 0.00 (page 10)	\$ 0.00 (page 10)
TOTAL	\$ 2,423,313.92	\$ 1,823,376.08

C: BOLI, DM, CS

Downers Grove Sanitary District Date: 07/11/2023

Treasurer's Report Recap for Month Ending 06/30/23

Page: 1

Fund	nun	ıbe	er & Description	Ending
				Fund Balance
Fund	01	:	GENERAL FUND	\$7,668,771.15
Fund	02	:	IMPROVEMENT FUND	\$1,401,572.93
Fund	03	:	CONSTRUCTION FUND	\$1,827,381.84
Fund	05	:	PUBLIC BENEFIT FUND	\$37,817.83
Recar	Т	ta	\$10,935,543.75	

DATE 07/11/23 MONTH ENDED 06/30/23 PAGE 1 FUND 01 GENERAL FUND

COST NUMBER DESCRIPTION	ACTUAL CURRENT	BUDGET CURRENT	ACTUAL	BUDGET	ACTUAL- BUDGET	VAR %	TOTAL
NUMBER DESCRIPTION	MONTH	MONTH	Y-T-D	Y-T-D	VARIANCE		BUDGET
DEPT 05 REVENUES							
3000 PROPERTY TAXES	616,999.31-	712,939-	757,390.82-	712,939-	44,451.82-	6.2	1,403,700-
3001 USER RECEIPTS	312,191.88-	296,087-	584,277.84-	596,875-	12,597.16	2.1-	3,959,800-
3002 SURCHARGES	24,678.38-	31,255-	59,348.64-	63,006-	3,657.36	5.8-	418,000-
3004 PLAN REVIEW FEES	.00	0	.00	125-	125.00	100.0-	500-
3005 CONSTRUCTION INSPECTION FEES	.00	0	.00	120-	120.00	100.0-	500-
3006 PERMIT INSPECTION FEES	1,720.00-	1,700-	3,160.00-	3,400-	240.00	7.1-	20,000-
3007 INTEREST ON INVESTMENTS	30,494.31-	5,600-	58,273.79-	11,200-	47,073.79-	420.3	67,050-
3013 SAMPLING AND MONITORING	8,682.98-	9,500-	20,440.77-	19,000-	1,440.77-	7.6	113,000-
3014 REPLACEMENT TAXES	.00	0	53,769.09-	17,300-	36,469.09-	210.8	120,000-
3015 MISCELLANEOUS INCOME	.00	500-	348.21-	1,000-	651.79	65.2-	5,000-
3016 SALE OF ELECTRICITY	.00	1,000-	.00	2,000-	2,000.00	100.0-	12,000-
3020 SALE OF PROPERTY	11,240.00-	3,200-	11,240.00-	6,400-	4,840.00-	75.6	37,700-
3021 TELEVISION INSPECTION	.00	0	.00	0	.00	.0	150-
3023 PROPERTY LEASE PAYMENTS	3,237.23-	3,275-	6,474.46-	6,550-	75.54	1.2-	39,300-
3024 MONTHLY SERVICE FEES	401,011.84-	361,663-	780,831.63-	729,067-	51,764.63-	7.1	4,836,800-
3027 GREASE WASTE	22,447.18-	19,500-	39,757.18-	40,000-	242.82	.6-	230,000-
3035 INTERFUND TRANSFER	.00	0	.00	0	.00	.0	800,000
3040 RENEWABLE ENERGY CREDITS	.00	0	10,115.16-	0	10,115.16-	.0	24,000-
3094 GRANTS AND INCENTIVES	.00	0	.00	0	.00	.0	1,589,881-
	=========	=======		=======		======	========
DEPT 05 TOTALS	1,432,703.11-		2,385,427.59-		176,445.59-		2,077,381-
FUND REVENUE TOTAL			2,385,427.59-		176,445.59-		2,077,381-
DEPT 11 O & M EXPENSES - ADMINISTRATION	========	=======	=======	=======	:=======	======	=======
SECT A SALARIES AND WAGES							
A001 TRUSTEES	.00	0	4,500.00	4,500	.00	.0	18,000
A002 BOLI	.00	0	.00	225	225.00-	100.0-	900
A003 GENERAL MANAGEMENT	20,547.48	33,643	42,746.58	57,623	14,876.42-	25.8-	272,250
A004 FINANCIAL RECORDS	26,819.87	29,572	52,715.11	58,222	5,506.89-	9.5-	254,450
A005 ADMINISTRATIVE RECORDS	3,967.13	2,885	6,178.48	5,715	463.48	8.1	24,900
A006 ENGINEERING	175.14	492	417.29	977	559.71-	57.3-	
A007 CODE ENFORCEMENT	38,886.83	58,008	78,359.76	107,851	29,491.24-		430,700
A008 SAFETY ACTIVITIES	4,943.08	5,717		11,411	2,549.22-	22.3-	49,500
A030 BUILDING AND GROUNDS	691.06	203	1,561.76		1,214.76		1,150
SECT A TOTALS	96,030.59	130,520	195,340.76	246,871		20.9-	1,056,100
SECT B OPERATIONS AND MAINTENANCE	==	=	=	=	====================================	=:	
B100 ELECTRICITY	.00	625	114.93	1,250	1,135.07-	90.8-	5,500
B101 NATURAL GAS	630.08	150	1,090.46	300	790.46	263.5	3,000
B102 WATER, GARBAGE AND OTHER UTILITIES	.00	0	48.72	200	151.28-	75.6-	
B110 BANK CHARGES	53.20	2,100	92.70	4,200	4,107.30-		
B112 COMMUNICATION	2,194.19	2,400	4,668.26	4,800	131.74-	2.7-	
B113 EMERGENCY/SAFETY EQUIPMENT	1,098.02	1,100	4,109.03	2,200	1,909.03		20,450
B115 EQUIPMENT/EQUIPMENT REPAIR	19,155.04	12,200	20,566.03	24,400	3,833.97-	15.7-	

DATE 07/11/23 MONTH ENDED 06/30/23 FUND 01 GENERAL FUND

	ACTUAL	BUDGET			ACTUAL-		
COST	CURRENT	CURRENT	ACTUAL	BUDGET	BUDGET	VAR	TOTAL
NUMBER DESCRIPTION	MONTH	MONTH	Y-T-D	Y-T-D	VARIANCE	%	BUDGET
B116 SUPPLIES	797.67	600	1,396.27	1,200	196.27	16.4	7,000
B117 EMPLOYEE/DUTY COSTS	2,413.82	1,600	3,714.58	3,200	514.58	16.1	19,000
B118 BUILDING AND GROUNDS	1,764.03	12,500	3,142.71	25,000	21,857.29-	87.4-	74,500
B119 POSTAGE	61.85	630	63.34	1,260	1,196.66-	95.0-	7,550
B120 PRINTING/PHOTOGRAPHY	763.68	7,500	5,656.36	8,200	2,543.64-	31.0-	12,700
B121 USER BILLING MATERIALS	11,837.93	8,000	13,606.99	16,000	2,393.01-	15.0-	88,000
B124 CONTRACT SERVICES	3,853.37	14,000	4,071.87	28,000	23,928.13-	85.5-	167,000
B137 MEMBERSHIPS/SUBSCRIPTIONS	134.40	0	134.40	900	765.60- =======	85.1-	9,500
SECT B TOTALS	44,757.28	63,405	62,476.65	121,110	58,633.35- =======	48.4-	633,650
SECT C VEHICLES							
C222 GAS/FUEL	184.23	300	360.52	600	239.48-	39.9-	3,200
C225 OPERATION/REPAIR	16.66	0	50.77	650	599.23- 	92.2-	2,600
SECT C TOTALS	200.89	300	411.29	1,250	838.71- ========	67.1-	5,800
DEPT 11 TOTALS	140,988.76	194,225	======================================	======= 369.231	========= 111,002.30-		 1,695,550
DEFT IT TOTALD	•	·		,	=========		
SECT A SALARIES AND WAGES A006 ENGINEERING	859.59	6,764	1,846.96	13,392	11,545.04-	86.2-	58,350
A000 ENGINEERING A009 OPERATIONS MANAGEMENT	9,915.08	14,236	19,322.42	23,728	4,405.58-	18.6-	113,900
A010 MAINTENANCE - BUDGET	.00	93,891	.00	181,582	13,329.09-	7.3-	689,650
A011 MAINTENANCE - WWTC	49,892.16	0 0	112,234.49	0	.00	.0	000,000
A013 MAINTENANCE - ENERGY RECOVERY	6,681.43	0	6,681.43	0	.00	.0	0
A014 MAINTENANCE - ELECTRICAL	24,229.91	0	49,336.99	0	.00	.0	0
A020 WWTC - BUDGET	.00	71.025	.00	141,575	4,134.34-	2.9-	614,600
A021 WWTC - OPERATIONS	42,298.50	0	91,354.53	0	.00	.0	0
A022 WWTC - SLUDGE HANDLING	24,869.45	0	44,054.37	0	.00	. 0	0
A023 WWTC - ENERGY RECOVERY	1,299.37	0	2,031.76	0	.00	.0	0
A030 BUILDING AND GROUNDS	11,155.73	14,096	20,287.91	27,901	7,613.09-	27.3-	119,150
SECT A TOTALS	171,201.22	200,012	347,150.86	388,178		10.6- 1	1,595,650
SECT B OPERATIONS AND MAINTENANCE	=========		========	=======	=========	======	=======
B100 ELECTRICITY	115.90	5,500	5,877.38	11,000	5,122.62-	46.6-	65,000
B101 NATURAL GAS	412.64	700	818.36	1,600	781.64-	48.9-	12,500
B102 WATER, GARBAGE AND OTHER UTILITIES	565.03	2,500	4,527.00	7,500	2,973.00-	39.6-	40,550
B103 ODOR CONTROL	.00	400	.00	800	800.00-	100.0-	3,400
B104 FUEL - GENERATORS	.00	0	.00	4,125	4,125.00-	100.0-	16,500
B112 COMMUNICATION	2,042.51	2,500	4,119.89	5,100	980.11-	19.2-	27,600
B113 EMERGENCY/SAFETY EQUIPMENT	995.53	3,000	2,444.37	6,000	3,555.63-	59.3-	35,350
B116 SUPPLIES	3,089.46	2,750	5,743.66	5,600	143.66	2.6	32,750
B117 EMPLOYEE/DUTY COSTS	1,403.87	3,000	5,899.76	5,400	499.76	9.3	30,000
B124 CONTRACT SERVICES	203,485.00	203,500	203,485.00	203,500	15.00-	.0	203,500
B130 NPDES PERMIT FEES	.00	0	.00	0	.00	.0	53,000
B131 SLUDGE HAULING/DISPOSAL SERVICES	.00	0	.00	0	.00	.0	90,000

PAGE 2

DATE 07/11/23 MONTH ENDED 06/30/23 PAGE 3 FUND 01 GENERAL FUND

ACTUAL BUDGET ACTUAL-COST CURRENT CURRENT ACTUAL BUDGET BUDGET VAR TOTAL NUMBER DESCRIPTION MONTH MONTH Y-T-DY-T-DVARIANCE % BUDGET ______ .00 B400 CHEMICALS - BUDGET .00 31,615 63,230 35,933.50-56.8-287,950 B401 CHEMICALS - DISINFECTION 5,294.12 0 5,294.12 0 .00 . 0 Ω .0 B402 CHEMICALS - SLUDGE DEWATERING 0 0 Ω 3,074.04 3,074.04 .00 0 B404 CHEMICALS - OTHER 18,928.34 0 18,928.34 .00 . 0 B501 EQPT/EQPT REPAIR - BIOSOLIDS AGING & DISPOS 7,000 32,090.48 14,000 18,090.48 129.2 234,100 32,069.85 2,400 B502 EQPT/EQPT REPAIR - DISINFECTION 147.49 98.0-31,300 111.55 7,300 7,152.51-.00 B503 EQPT/EQPT REPAIR - EXCESS FLOW 2.600 .00 5.200 5.200.00-100.0-31,100 B504 EOPT/EOPT REPAIR - GRIT REMOVAL 6.031.55 1.700 6.031.55 3.300 2.731.55 82.8 45.800 .00 296.46 20,000 19,703.54-98 5-B505 EOPT/EOPT REPAIR - INFLUENT PUMPING 10,000 66.800 2,045.52 22,000 2,145.35 44,000 41,854.65- 95.1- 138,700 B506 EOPT/EOPT REPAIR - PRIMARY TREATMENT 7,758.11-B507 EOPT/EOPT REPAIR - SECONDARY TREATMENT 4.800 1.941.89 9.700 80.0- 107.400 1.924.54 96.2-B508 EQPT/EQPT REPAIR - SLUDGE CONCENTRATION 33.81 450 33.81 900 866.19-5,400 B509 EOPT/EOPT REPAIR - SLUDGE DEWATERING 11,160.28 2,250 11,160.28 4,500 6,660.28 148.0 27,000 B510 EQPT/EQPT REPAIR - SLUDGE DIGESTION 15,550 495.00 5,550 495.00 15,055.00-96.8- 241,300 B511 EQPT/EQPT REPAIR - TERTIARY TREATMENT 22,181.23 22,000 22,181.23 32,000 9,818.77-30.7- 123,700 B512 EOPT/EOPT REPAIR - WWTC GENERAL 4,357.80 3,700 5,525.16 13,700 8,174.84- 59.7- 68,700 B513 EOPT/EOPT REPAIR - WWTC UTILITIES 100,000 15,678.78 170,000 154,321.22- 90.8- 729,950 14,975.21 .00 670 670.00- 100.0-B801 BLDG AND GROUNDS - BIOSOLIDS AGING & DISPOS .00 333 4,000 B802 BLDG AND GROUNDS - DISINFECTION .00 800 49.61 1.600 1.550.39-96.9-9.600 .00 92 B803 BLDG AND GROUNDS - EXCESS FLOW .00 184 184.00-100.0-1.100 B804 BLDG AND GROUNDS - GRIT REMOVAL 14.59 800 28.06 1,700 1,671.94- 98.4- 31,100 B805 BLDG AND GROUNDS - INFLUENT PUMPING 12,500.00 700 12,500.00 1,400 11,100.00 792.9 8.100 B807 BLDG AND GROUNDS - SECONDARY TREATMENT .00 .00 375 375.00- 100.0-175 2.200 B809 BLDG AND GROUNDS - SLUDGE DEWATERING 2,250.00 200 3,457.34 400 3,057.34 764.3 11,700 B810 BLDG AND GROUNDS - SLUDGE DIGESTION .00 500 .00 1,000 1,000.00-100.0-29,400 1,000 2,000 B811 BLDG AND GROUNDS - TERTIARY TREATMENT 4,465.09 4,593.94 2,593.94 129.7 15,700 B812 BLDG AND GROUNDS - WWTC GENERAL 55,073.59 31,750 58,979.83 63,900 4,920.17-7.7- 247,150 B813 BLDG AND GROUNDS - WWTC UTILITIES 147.50 450 302.50- 67.2-147.50 ______ 476,490 SECT B TOTALS 409,243.55 437,695.68 727,684 289,988.32- 39.9-3,112,100 ______ SECT C VEHICLES C222 GAS/FUEL 1,353.33 3,500 2,822.54 6,000 3,177.46- 53.0- 40,000 C225 OPERATION/REPAIR 467.28 700 768.94 1,500 731.06- 48.7-8.500 C226 VEHICLE PURCHASES 17,768.00 17,800 17,768.00 17,800 93,300 32.00-. 2-______ SECT C TOTALS 22,000 21,359.48 25,300 3,940.52- 15.6- 141,800 19,588.61 ______ ______ DEPT 12 TOTALS 600,033.38 698,502 806,206.02 1,141,162 334,955.98- 29.4-4,849,550 ______ DEPT 13 O & M EXPENSES - LABORATORY SECT A SALARIES AND WAGES A009 OPERATIONS MANAGEMENT 4,159.86 10,431 9,219.04 17,386 8,166.96- 47.0- 83,450 .00 A040 LABORATORY - BUDGET 22,146 .00 43,000 2,279.96 5.3 189,350 0 0 A041 LAB - WWTC 19.252.61 37,821.05 . 0 Ο .00 4,029.32 6,593.12 0 .00 0 A042 LAB - PRETREATMENT 0 . 0 A048 LAB - ENERGY RECOVERY 421.04 0 865.79 0 .00 . 0 Ω ______ SECT A TOTALS 27,862.83 32,577 54,499.00 60,386 5,887.00- 9.8- 272,800 ______

MONTH ENDED 06/30/23

FUND 01 GENERAL FUND

DATE 07/11/23

ACTUAL BUDGET ACTUAL-COST CURRENT CURRENT ACTUAL BUDGET BUDGET VAR TOTAL NUMBER DESCRIPTION MONTH MONTH Y-T-DY-T-DVARIANCE 8 BUDGET ______ OPERATIONS AND MAINTENANCE B112 COMMUNICATION 65.19 350 441.53 800 358.47-44.8-4,000 B114 CHEMICALS 2,003.59 2,200 2,003.59 4,400 2,396.41- 54.5- 25,500 2,400 8,937.29 4,800 B115 EQUIPMENT/EQUIPMENT REPAIR 6,916.49 4,137.29 86.2 28,000 2,600 1,074.54 5,200 4,125.46- 79.3- 25,900 B116 SUPPLIES 785.29 1,100 495.12 45.0 1,595.12 B117 EMPLOYEE/DUTY COSTS 631.47 500 6,000 0 .00 1,375.00-5.500 B122 MONITORING EQUIPMENT .00 1,375 100.0-B123 OUTSIDE LAB SERVICES 4.064.00 2.200 7.060.60 4.400 60.5 24.800 2,660,60 ______ SECT B TOTALS 14,466.03 10,250 21,112.67 22,075 962.33-______ SECT C VEHICLES C222 GAS/FUEL 57.04 100 134.73 200 65.27-32.6-13.38 C225 OPERATION/REPAIR 75 8.33 0 61.62- 82.2-250 ______ SECT C TOTALS 148.11 275 126.89- 46.1-______ DEPT 13 TOTALS 42.394.23 42.927 75.759.78 82.736 6.976.22- 8.4- 393.650 ______ DEPT 14 O & M EXPENSES - SEWER SYSTEM SECT A SALARTES AND WAGES A006 ENGINEERING 188.54 898 523.62 1,705 1,181.38-69.3-7,600 .00 31,642 .00 A050 SEWER MAINTENANCE - BUDGET 63,268 12,546.33 19.8 274,200 72,204.52 .0 0 .00 0 A051 SEWER MAINTENANCE 35.117.91 0 1,439.07 0 A054 SEWER MAINTENANCE - BACKUPS AND HIGH FLOWS 3,609.81 0 .00 .0 0 A060 INSPECTION - BUDGET .00 28,116 .00 56,195 16,561.39-29.5-0 0 .0 A061 INSPECTION - NEW CONSTRUCTION 106.35 106.35 .00 0 13,498.16 A062 INSPECTION - CONSTRUCTION OF DGSD PROJECTS 8,384.11 0 0 .00 . 0 0 A063 INSPECTION - PERMIT INSPECTIONS 2,314.48 0 4,334.19 0 .00 . 0 0 4,698.21 .0 A064 INSPECTION - MISCELLANEOUS 2.351.35 Ω Ω .00 Ω A065 INSPECTION - CONSTR BY VILLAGES, UTILITIES 3,075.61 0 4,217.51 0 .00 .0 0 A066 INSPECTION - CODE ENFORCEMENT 4,849.59 0 12,779.19 0 .00 . 0 Ο A070 SEWER INVESTIGATIONS - BUDGET .00 530 70-47.0-.00 559 1,129 4.450 A072 SEWER INVESTIGATIONS 119.67 0 598.30 0 .00 .0 Ο ______ SECT A TOTALS 57,946.68 61,215 116,569.86 122,297 5.727.14-4.7- 529.850 ______ SECT B OPERATIONS AND MAINTENANCE 243.75 1.000 2,014.50 2.000 14.50 12,000 B112 COMMUNICATION . 7 681.11-B113 EMERGENCY/SAFETY EQUIPMENT 18.89 350 18.89 700 97.3-3,400 B115 EQUIPMENT/EQUIPMENT REPAIR 7,299.73 3,200 9,218.00 6,400 2,818.00 44.0 44,500 300 474.42 650 175.58-27.0-B116 SUPPLIES 179.56 4.100 B117 EMPLOYEE/DUTY COSTS 3,497.88 1,300 4,687.06 2,600 2,087.06 80.3 15,500 B127 JULIE SYSTEM 1,300 11,079.63 2,600 8,479.63 326.1 .00 15.400 B128 OVERHEAD SEWER/BACKFLOW PREVENTION PROGRAM .00 4,000.00- 100.0- 15,000 2.000 4,000 .00 B129 REIMBURSEMENT PROGRAM/PUBLIC SEWER BLOCKAGE 1,000 .00 2,000 2,000.00-100.0-.00 12,000 B900 SEWER SYSTEM REPAIRS - BUDGET .00 117,000 218,000 114,051.14-52.3- 4,271,600 .00 .00 .0 B901 SEWER SYSTEM REPAIRS - I/I PROGRAM 175.00 0 .00

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PAGE 4

DATE 07/11/23 MONTH ENDED 06/30/23 PAGE 5 FUND 01 GENERAL FUND

COST NUMBER DESCRIPTION	ACTUAL CURRENT MONTH	BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	ACTUAL- BUDGET VARIANCE	VAR %	TOTAL BUDGET
DOG CHARD CAGEEN DEDATES DEVALUE TRANSPOR		-======= 0		======= 0	.00		
B903 SEWER SYSTEM REPAIRS - REHABILITATION B910 SEWER SYSTEM REPAIRS - BSSRAP PROGRAM	3,941.25 104,434.63	0	3,941.25 97,582.61	0	.00	.0	0
B913 SEWER SYSTEM REPAIRS - BSSRAP-REPAIR/REPL/R	2,250.00	0	2,250.00	0	.00	.0	0
			•		==========		
SECT B TOTALS	121,865.69	127,450	131,441.36	238,950	107,508.64-		1,393,500
SECT C VEHICLES							
C222 GAS/FUEL	931.59	2,300	2,055.23	4,600	2,544.77-	55.3-	26,000
C225 OPERATION/REPAIR	345.59	750	453.37	1,500	1,046.63-	69.8-	9,000
C226 VEHICLE PURCHASES	.00	483,000	.00	483,000	483,000.00-	100.0-	567,500
SECT C TOTALS	1,277.18	486,050	2,508.60	489,100	486,591.40-	99.5-	602,500
=	========			=======	=========	======	
DEPT 14 TOTALS	181,089.55	674,715	250,519.82	850,347	599,827.18-	70.5- !	5,525,850
DEPT 15 O & M EXPENSES - LIFT STATIONS	========			=======	========	======	
SECT A SALARIES AND WAGES							
A006 ENGINEERING	.00	917	48.25	1,737	1,688.75-	97.2-	7,750
A009 OPERATIONS MANAGEMENT	958.06	824	1,868.73	1,373	495.73	36.1	4,250
A030 BUILDING AND GROUNDS	.00	175	3,103.20	292	2,811.20	962.7	900
A080 LIFT STATION MAINTENANCE	676.35	2,042	1,781.37	3,914	2,132.63-	54.5-	15,700
SECT A TOTALS	1,634.41	3,958	6,801.55	7,316	======================================	7.0-	28,600
SECT B OPERATIONS AND MAINTENANCE							
B100 ELECTRICITY	8,271.66	13,500	16,340.87	27,000	10,659.13-	39.5-	162,000
B104 FUEL - GENERATORS	.00	0	.00	1,050	1,050.00-	100.0-	4,000
B112 COMMUNICATION	312.64	500	348.65	1,000	651.35-	65.1-	5,400
B113 EMERGENCY/SAFETY EQUIPMENT	.00	0	.00	3,800	3,800.00-	100.0-	11,100
B116 SUPPLIES	80.95	0	80.95	100	19.05-	19.1-	300
B520 EQPT/EQPT REPAIR - BUTTERFIELD	.00	1,000	.00	2,000	2,000.00-	100.0-	7,400
B521 EQPT/EQPT REPAIR - CENTEX	.00	200	148.20	400	251.80-	63.0-	2,000
B522 EQPT/EQPT REPAIR - COLLEGE	396.99	1,000	396.99	11,000	10,603.01-	96.4-	35,600
B523 EQPT/EQPT REPAIR - EARLSTON	.00	1,000	.00	2,000	2,000.00-	100.0-	6,300
B524 EQPT/EQPT REPAIR - HOBSON	.00	25,000	1,633.87	50,000	48,366.13-	96.7-	94,000
B525 EQPT/EQPT REPAIR - LIBERTY PARK	.00	500	.00	1,500	1,500.00-	100.0-	4,100
B526 EQPT/EQPT REPAIR - NORTHWEST	.00	2,500	.00	10,000	10,000.00-	100.0-	13,700
B527 EQPT/EQPT REPAIR - VENARD	987.29	1,000	987.29	2,000	1,012.71-	50.6-	7,100
B528 EQPT/EQPT REPAIR - WROBLE	.00	500	.00	7,500	7,500.00-	100.0-	12,800
B529 EQPT/EQPT REPAIR - LIFT STATIONS GENERAL	5,881.21	5,000	6,183.93	10,000	3,816.07-	38.2-	66,350
B820 BLDG AND GROUNDS - BUTTERFIELD	148.20	0	333.20	0	333.20	.0	0
B821 BLDG AND GROUNDS - CENTEX	148.20	0	148.20	0	148.20	.0	0
B822 BLDG AND GROUNDS - COLLEGE	.00	0	.00	0	.00	.0	20,000
B823 BLDG AND GROUNDS - EARLSTON	179.60	0	327.80	0	327.80	.0	25,000
B824 BLDG AND GROUNDS - HOBSON	206.60	0	354.80	1,000	645.20-	64.5-	21,000
B825 BLDG AND GROUNDS - LIBERTY PARK	201.20	0	349.40	0	349.40	.0	0
B826 BLDG AND GROUNDS - NORTHWEST	242.30	5,000	390.50	10,000	9,609.50-	96.1-	37,000
B827 BLDG AND GROUNDS - VENARD	193.65	2,500	341.85	10,000	9,658.15-	96.6-	10,000

DATE 07/11/23 MONTH ENDED 06/30/23 PAGE 6 FUND 01 GENERAL FUND

COST NUMBER DESCRIPTION	ACTUAL CURRENT MONTH	BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	ACTUAL- BUDGET VARIANCE	VAR %	TOTAL BUDGET
B828 BLDG AND GROUNDS - WROBLE	201.20	0	349.40	0	349.40	.0	8,600
B829 BLDG AND GROUNDS - LIFT STATIONS GENER.		3,000	279.60	6,000	5,720.40-	95.3-	31,750
SECT B TOTALS	17,731.29	62,200	28,995.50	156,350 ======	127,354.50-	81.5-	585,500
DEPT 15 TOTALS	19,365.70	66,158	35,797.05	163,666	127,868.95-	78.1-	614,100
DEPT 17 O & M EXPENSES - INSURANCE & E							
SECT E INSURANCE AND EMPLOYEE BENEFIT	S						
E452 LIABILITY/PROPERTY	.00	0	210,366.00	249,850	39,484.00-	15.8-	249,850
E455 EMPLOYEE GROUP HEALTH	48,737.92	55,000	91,940.15	110,000	18,059.85-	16.4-	658,000
E460 IMRF	17,300.87	30,000	34,556.38	57,500	22,943.62-	39.9-	250,000
E461 SOCIAL SECURITY	26,609.75	31,200	54,076.49		5,723.51-		260,000
SECT E TOTALS	92,648.54	116,200	390,939.02	477,150	86,210.98-	18.1- 1	L,417,850
	=========	=======	:========		:========		
DEPT 17 TOTALS	92,648.54	116,200	390,939.02	•	86,210.98-		
DEPT 91 SA EXPENSE							
DEPT 91 TOTALS	.00	0	.00	0	.00	()
FUND EXPENSE TOTAL	1,076,520.16	1,792,727	1,817,450.39	3,084,292	1,266,841.61-	41.1-14	1,496,550
FUND 01 TOTALS	356,182.95-	346,508	567,977.20-	875,310	1,443,287.20-	164.9- 2	2,419,169

DATE 07/11/23 MONTH ENDED 06/30/23 PAGE 7

FUND 02 IMPROVEMENT FUND

	COST DESCRIPTION	ACTUAL CURRENT MONTH	BUDGET CURRENT MONTH	ACTUAL Y-T-D	BUDGET Y-T-D	TOTAL BUDGET	
	REVENUES						
	ON INVESTMENTS WER SERVICE CHARGES ID TRANSFER	1,362.17- .00 .00	7,500- 0	.00	800- 15,000- 0	90,000-	
DEPT 05	TOTALS	1,362.17-	7,900-	2,737.64-	15,800-	894,700-	=======================================
DEPT 30	CAPITAL EXP - ARRA - LOAN REPAYMENT		========	:========	:=======	========	=======================================
0500 PROJECT	BUDGET	.00	0	.00	0		
DEPT 30	TOTALS	.00	0	.00	0	93,200	
DEPT 36	CAPITAL EXP - LIBERTY PARK LIFT STA		========	:========	:=======	========	=======================================
DEPT 36	TOTALS	.00	0	.00	0	0	
DEPT 47	CAPITAL EXP - CENTEX LIFT STATION U	JPGRADE					
0500 PROJECT 0504 CONSTRUC	BUDGET TION ADMIN/RESIDENT ENG/ARCH SUPRVI	•		.00 5,531.94	0	304,400	
DEPT 47	TOTALS	5,531.94	152,200	5,531.94	304,400	304,400	
DEPT 48	CAPITAL - VENARD LIFT STATION UPGRA						
0500 PROJECT 0502 DESIGN E	BUDGET ENGINEERING/ARCHITECTURAL	.00 393.75	20,000	.00 393.75	20,000	850,000 0	
DEPT 48	TOTALS	393.75	20,000	393.75	20,000	850,000	
DEPT 74	CAPITAL EXP - SEWER - UNSEWERED ARE		=======		:=======	=======	
0500 PROJECT	BUDGET	.00	0	.00	0	500	
DEPT 74	TOTALS	.00	0	.00	0	500	
FUND EXP	PENSE TOTAL	5,925.69	172,200	5,925.69	324,400	1,248,100	
FUND 02	TOTALS	4,563.52		3,188.05	308,600	353,400	

DATE 07/11/23 MONTH ENDED 06/30/23 PAGE 8

FUND 03 CONSTRUCTION FUND

		COST	ACTUAL CURRENT	BUDGET CURRENT	ACTUAL	BUDGET	TOTAL	
NUMBER	DESCRIPTION		MONTH	MONTH	Y-T-D	Y-T-D	BUDGET	
DEPT 05	REVENUES			=======	========	=======		
3007 INTERES	T ON INVEST	MENTS	2,372.68-	1,475-	4,739.19-	2,950-	17,700-	
3009 SEWER F	ERMIT FEES		15,050.00-	•	30,409.50-	41,800-	250,000-	
DEPT 05	TOTALS		17,422.68-	22,375-	35,148.69-	44,750-	267,700-	
DEPT 20	CAPITAL EXI	P - WWTC - GAS DETECTION/F	ALARMING					
0500 PROJECT	BUDGET		.00	14,000	.00	14,000	419,000	
DEPT 20	TOTALS	=	.00	14,000	.00	14,000	419,000	
DEPT 21	CAPITAL EXI	= P - WWTC - BIOSOLIDS IMPRO		=======	========	=======	=======	
0500 PROJECT	BUDGET		.00	12,000	.00	12,000	997,500	
DEPT 21	TOTALS	=	.00	12,000	.00	12,000	997,500	
DEPT 30	CAPITAL EXI	= P - ARRA - LOAN REPAYMENTS		=======	========			
0500 PROJECT	BUDGET		.00	0	.00	0	28,807	
DEPT 30	TOTALS	=	.00	0	.00	0	28,807	
DEPT 31	CAPITAL EXI	= - WWTC - CHP BIOGAS		=======	=======			
DEPT 31	TOTALS	=	.00	0	.00	0	0	
DEPT 32	CAPITAL EXI	= P - WWTC - SECOND TURBOBLO		=======	========	-======		
DEPT 32	TOTALS		.00	0	.00	0	0	
DEPT 33	CAPITAL EXI	- P - WWTC - DIGESTER MIXING						
DEPT 33	TOTALS		.00	0	.00	0	0	
DEPT 34	CAPITAL EXI	= P - WWTC - GREASE WASTE DE		=====				
DEPT 34	TOTALS	=	.00	0	.00	0	0	
DEPT 35	CAPITAL EXI	= P - WWTC - CHP BIOGAS PHAS		=======	=========			
DDD# 35	топът с	=						=======================================
DEPT 35	TOTALS		.00	0	.00	0	0	

DATE 07/11/23 MONTH ENDED 06/30/23 PAGE 9

FUND 03 CONSTRUCTION FUND

ACTUAL BUDGET COST CURRENT CURRENT ACTUAL BUDGET TOTAL NUMBER DESCRIPTION MONTH MONTH Y-T-DY-T-D BUDGET CAPITAL EXP - WWTC - GREASE RECEIVING STATN NO2 ______ DEPT 37 TOTALS .00 0 .00 ______ DEPT 38 CAPITAL EXP - WWTC - PROPERTY ACQUISITION ______ 0 0 0 DEPT 38 TOTALS .00 .00 ______ DEPT 39 CAPITAL EXP - WWTC - GRIT BLOWER REPLACEMENT ______ DEPT 39 TOTALS 0 .00 0 .00 0 ______ DEPT 40 CAPITAL EXP - WWTC - LOAN REPAYMENT ______ DEPT 40 TOTALS 0 .00 0 ______ FUND EXPENSE TOTAL 26,000 .00 26,000 1,445,307 ______ FUND 03 TOTALS 17,422.68-3,625 35,148.69- 18,750-1,177,607

FUND 05 TOTALS

DATE 07/11/23 MONTH ENDED 06/30/23 PAGE 10
FUND 05 PUBLIC BENEFIT FUND

			ACTUAL	BUDGET				
		COST	CURRENT	CURRENT	ACTUAL	BUDGET	TOTAL	
NUMBER	DESCRIPTION		MONTH	MONTH	Y-T-D	Y-T-D	BUDGET	
========			========		========	=======		:========
DEPT 05	REVENUES							
		==	========	========	========	=======	=========	:========
DEPT	05 TOTALS		.00	0	.00	0	0	
		==	========	========	========	=======	=========	:=========
DEPT 59	CAPITAL EXP	- SEWER - SEWER EXTENSION	S					
		==	========	=========	========	=======	==========	:=========
DEPT	59 TOTALS		.00	0	.00	0	0	
		==	========		========	=======		:========
DEPT 65	CAPITAL EXP	- SEWER - REIMB FOR ADDED	DEPTH					
		==						
DEDE	CE MOMATO		.00	0	.00	0	0	
DEPT	65 TOTALS		.00	U	.00	U	U	
		==	========	========	=======	=======	=========	=======================================
FUND	EXPENSE TOTAL		.00	0	.00	0	0	
		==	=========	=========	========	========	==========	:=========

.00 0 .00 0

DATE 07/11/23 MONTH ENDED 06/30/23 PAGE 11

FUND 71 SEWER EXTENSIONS ESCROW

FUND EXPENSE TOTAL

FUND 71 TOTALS

		ACTUAL	BUDGET				
	COST	CURRENT	CURRENT	ACTUAL	BUDGET	TOTAL	
NUMBER	DESCRIPTION	MONTH	MONTH	Y-T-D	Y-T-D	BUDGET	
========				========			
DEPT 05	REVENUES						
		=========	========	========			
DEPT	05 TOTALS	.00	0	.00	0	0	
DEPT 92	SEWER EXPENSE						
		=========	========	========			
DEPT	92 TOTALS	.00	0	.00	0	0	

.00

0

0

0 .00

.00 0 .00

0

0

Personnel

The District is still accepting applications for the open Sewer System Engineering Technician position. If you know anyone interested, please send them to www.dgsd.org/opportunities to apply.

Retirement Dinner – Jeff Barta

The District is hosting a dinner on July 19 at Zazzos Pizza to celebrate the retirement of Jeff Barta. Please visit the employee portal to RSVP for this event. We will need all responses by July 12 to provide a final headcount to Zazzos. Hope to see you all there!

District Polo Shirts

The District is doing a second round of polo shirt orders for employees. If you placed an order previously, it is on its way and should arrive the first week of July. Those will be dispersed once received. If you are interested in ordering polos, please visit the employee portal to place your order. Deadline is July 14th. These shirts are part of the outerwear reimbursement amount. Admin staff can use this opportunity to order shirts as well for Open House. There is a limit of 2 shirts for Admin Staff only. If you wish to place an order but can't access the shop, please see Carly Shaw for assistance.

Adopt-A-Stream Cleanup Volunteers

Downers Grove First United Methodist Church has organized a cleanup for a section of St. Joseph Creek that will take place on July 29, 2023 from 9 am – Noon. If you are interested in volunteering, please sign up on the sheet posted at the time clocks in the MSB or Admin Center by Friday July 21st. The event starts at our plant then will work down the portion of the creek that the Church has adopted. We appreciate the efforts in keeping our environment clean!

WEF Tech Expo

As a reminder, WEFTEC will be held in Chicago October 2-4. Plant and sewer system staff are welcome to attend the Exhibitor's Hall on one day of the event if they wish to do so. Because we can save money by registering early, we ask if you are interested in attending this year to let Carly Shaw know as soon as possible and include what date you wish to attend. The deadline for the reduced rate is July 14.

TopHealth

July's issue of Top Health is enclosed.

Sewer Rehabilitation/Infiltration and Inflow Removal

We are targeting the 2C-025 area in downtown Downers Grove for private property inspections and I/I removal. Regular flow monitoring continues.

Status of Projects

1) 001 Outfall Pipe Repair

The pipe is expected to be delivered in mid-September.

2) Centex Lift Station Replacement

The electrical pads were poured.

3) Administration Center Modifications

Inspections are ongoing for the original scope of work. Replacing the rest of the carpet in the Admin Center was added to YAD's scope. The carpet has been ordered.

4) Curtiss Street Trunk Sewer Rehabilitation

EPA is currently reviewing the bid documents to ensure the grant requirements have been incorporated before bidding.

5) Venard Forcemain Replacement

Baxter & Woodman is preparing plans and specifications.

6) 2D Basin (Carpenter St)/Ogden Ave Lining

This project was advertised on June 29. Bids will be opened on July 13.

7) Alley H Sewer Replacement

The work started three weeks ago.

8) 2023 Painting Services

The agreement has been sent to G.P. Maintenance for signatures.

9) SCADA Platform Replacement (Ignition)

A kickoff meeting was held on June 15. In this project, the SCADA system will be migrated to a new software platform which is called Ignition.

10) Dewatering Unit Pilot

HUBER Technology is scheduled to perform a pilot test the week of July 31. They will be demonstrating the HUBER Sludge Dewatering Q-Press.

11) Diesel Tank Replacement

Baxter & Woodman is preparing plans and specifications.

Personnel

Adrienne Kasper has reached 20 years of service with the District as of July 10, 2023. Please help the District congratulate her on this milestone!!

The District is still accepting applications for the open Sewer System Engineering Technician position. If you know anyone interested, please send them to www.dgsd.org/opportunities to apply.

District Polo Shirts

The District is doing a second round of polo shirt orders for employees and the deadline for ordering has been extended to Friday, July 21. These shirts are part of the outerwear reimbursement amount. Admin staff can use this opportunity to order shirts as well for Open House. There is a limit of 2 shirts for Admin Staff only. Orders can be placed on the employee portal using the shop. If you wish to place an order but can't access the shop, please see Carly Shaw for assistance.

Jeff Barta Retirement Dinner

Thank you to all for your responses to Jeff's retirement dinner. This dinner will be held at Zazzos Pizza in Westmont at 5:30 pm.

Adopt-A-Stream Cleanup Volunteers

As a final reminder the Downers Grove First United Methodist Church has organized a cleanup for a section of St. Joseph Creek that will take place on July 29, 2023 from 9 am – Noon. If you are interested in volunteering, please sign up on the sheet posted at the time clocks in the MSB or Admin Center by Friday July 21st. The event starts at our plant then will work down the portion of the creek that the Church has adopted. We appreciate the efforts in keeping our environment clean!

WEFTEC Registration

WEFTEC registration was completed for those who let Carly Shaw know that they wished to attend. As part of the registration process, the District signed an Assumption of the Risk and Waiver of Liability on each employee's behalf. This is enclosed for your information.

WWTC Operations Data – June

The DMR for June indicates that the final effluent averaged 1.9 mg/l CBOD, 1.2 mg/l suspended solids and 0.14 mg/l ammonia nitrogen over a daily average flow of 7.24 MGD. There were no permit excursions in June.

Sewer Permits – June

There were 10 sewer permits issued in June – 4 single family, 2 commercial, 1 repair and 10 disconnections.

Financial Data - June

In June, the District received \$1,432,703.11 in the General fund, including \$312,192 in user charges, \$616,999 in property taxes, \$24,678 in surcharges, and \$401,012 in monthly fees. General fund expenses totaled \$1,076,520. The Improvement fund had revenues of \$1,362 and expenses of \$5,926. The Construction fund had revenues of \$17,423 and expenses of \$0.

Sewer Rehabilitation/Infiltration and Inflow Removal

We are targeting the 2C-025 area in downtown Downers Grove for private property inspections and I/I removal. Regular flow monitoring continues.

Status of Projects

1) 001 Outfall Pipe Repair

The pipe is expected to be delivered in mid-September.

2) Centex Lift Station Replacement

The generator and control panel were set in place this week.

3) Administration Center Modifications

Inspections and subsequent corrections are ongoing for the original scope of work. Replacing the rest of the carpet in the Admin Center was added to YAD's scope. The carpet has been ordered.

4) Curtiss Street Trunk Sewer Rehabilitation

This project was advertised for bid on July 13.

5) Venard Forcemain Replacement

Baxter & Woodman is preparing plans and specifications.

6) 2D Basin (Carpenter St)/Ogden Ave Lining

Bids were opened on July 13. Visu-Sewer was the low bidder. The contract will be presented to the Board for approval at the July 18 meeting.

7) Alley H Sewer Replacement

Work is ongoing.

8) 2023 Painting Services

G.P. Maintenance has returned all their paperwork. The project is expected to start soon.

9) SCADA Platform Replacement (Ignition)

A kickoff meeting was held on June 15. In this project, the SCADA system will be migrated to a new software platform which is called Ignition. Concentric is preparing preliminary submittals.

10) Dewatering Unit Pilot

HUBER Technology is scheduled to perform a pilot test the week of July 31. They will be demonstrating the HUBER Sludge Dewatering Q-Press.

11) Diesel Tank Replacement

Baxter & Woodman is preparing plans and specifications.

DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER Wastewater Report, June 2023

For updates on your plant in-between these monthly reports, please visit our wastewater dashboard https://iwss.uillinois.edu

LOCATION: DOWNERS GROVE S.D. - WASTEWATER TREATMENT CENTER (DuPage County)

Catchment Information		
Population Served	65,000	
NPDES	IL0028380	
zipcode	60515	
IL Covid Region	8	

SARS-CoV-2 LEVELS IN WASTEWATER

Wastewater is analyzed using digital PCR (dPCR) to determine the concentration of the SARS-CoV-2 virus in a sample. The nucleocapsid protein (N) gene of the virus is targeted in the assay, and results are reported in gene copies per liter of starting wastewater.

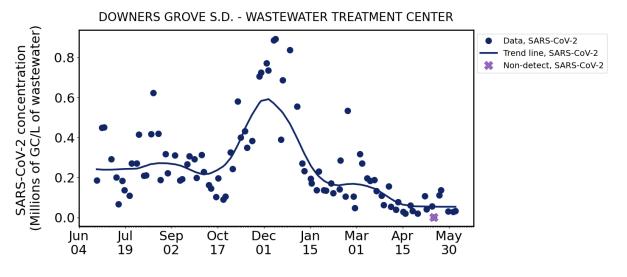


Figure 1. Time series plot of SARS-CoV-2 viral concentrations in millions of gene copies per liter (GC/L) of wastewater.

SARS-CoV-2 SAMPLING RESULTS - LAST 8 SAMPLES

Date	SARS-CoV-2 (GC/L)
2023-06-06	32,250



2023-06-04	28,725
2023-05-30	32,025
2023-05-23	137,550
2023-05-21	111,075
2023-05-16	Non-detect
2023-05-14	55,800
2023-05-09	41,700

SARS-CoV-2 LINEAGES IN WASTEWATER

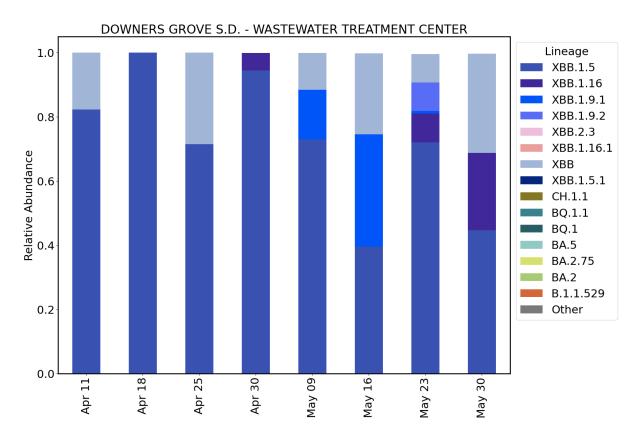


Figure 2. Stacked barplot showing the relative abundances of SARS-CoV-2 lineages in wastewater samples. All lineages in the legend, excluding "Other," are associated with Omicron. The most recently available two months worth of data are shown.



INFLUENZA A/B LEVELS IN WASTEWATER

Wastewater is analyzed using digital PCR (dPCR) to determine the concentration of influenza A and influenza B viruses in a sample. Results are reported in gene copies per liter of starting wastewater.

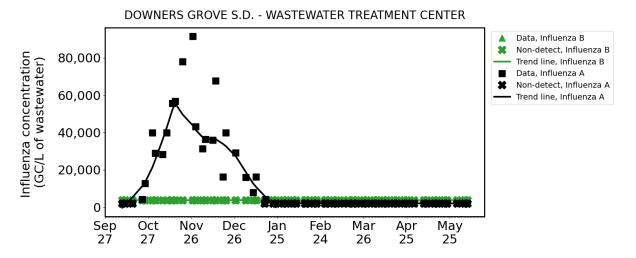


Figure 3. Time series plot of Influenza A/B viral concentrations in gene copies per liter (GC/L) of wastewater.

INFLUENZA A/B SAMPLING RESULTS - LAST 8 SAMPLES

Date	Influenza A (GC/L)	Influenza B (GC/L)
2023-06-06	Non-detect	Non-detect
2023-06-04	Non-detect	Non-detect
2023-05-30	Non-detect	Non-detect
2023-05-23	Non-detect	Non-detect
2023-05-21	Non-detect	Non-detect
2023-05-16	Non-detect	Non-detect
2023-05-14	Non-detect	Non-detect
2023-05-09	Non-detect	Non-detect



RSV LEVELS IN WASTEWATER

Wastewater is analyzed using digital PCR (dPCR) to determine the concentration of Respiratory Syncytial Virus (RSV) in a sample. Results are reported in gene copies per liter of starting wastewater.

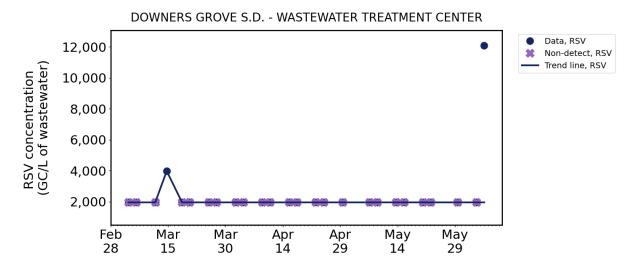


Figure 4. Time series plot of RSV viral concentrations in gene copies per liter (GC/L) of wastewater.

RSV SAMPLING RESULTS - LAST 8 SAMPLES

Date	RSV (GC/L)
2023-06-06	12,075
2023-06-04	Non-detect
2023-05-30	Non-detect
2023-05-23	Non-detect
2023-05-21	Non-detect
2023-05-16	Non-detect
2023-05-14	Non-detect
2023-05-09	Non-detect



Guide to Interpreting Data on SARS-CoV-2, Influenza, & Respiratory Syncytial Virus (RSV) Gene Copies in Wastewater Samples

What do the results mean?

There are several factors to consider when interpreting viral data in wastewater. The rate, magnitude, and duration of shedding may vary from one person to another and from virus to virus, thus how or even whether it is possible to translate viral levels in wastewater into precise community health metrics is an open scientific question. It is only appropriate to monitor and observe the trends of viral gene copies detected in a community over time. The data presented in tables, graphs, and trend assessments show the concentration of RNA copies in the wastewater area from the community where the wastewater was collected. A significant increase in viral gene copies over time is an indicator that cases may be increasing in the community. Wastewater data should not be interpreted in isolation but rather considered alongside other public health metrics.

What does the number that is reported on a sample day mean?

It is a measure of how many gene copies are present in a sample, typically reported as gene copies per liter of wastewater (GC/L). Samples are typically obtained from municipal wastewater treatment plants and reflect inputs of viral material shed by the community served by the treatment plant. This number does not indicate gene copies per person or population.

How are the gene copies measured in the wastewater?

Wastewater samples are first processed to concentrate and isolate genetic material (RNA) that is present in the sample. RNA sequences specific to SARS-CoV-2, influenza A & B, and RSV are then detected and quantified using a molecular biology tool called digital polymerase chain reaction (dPCR). During dPCR, a targeted segment of the RNA is converted to DNA and then amplified (copied many times) so it can be detected by laboratory instruments. Specific methods for sample processing and PCR-based quantification differ among wastewater monitoring projects and analytical laboratories.

What does it mean if a data point for a sample is 0 or a non-detect?

A non-detect means that the amount of SARS-CoV-2, influenza, or RSV RNA in the wastewater sample is below the level that can be reliably detected by the quantification methods used in a given laboratory. A determination of non-detect does not necessarily mean that no viral RNA is present in the sample or in the system – rather that the levels are low enough that they cannot be reliably determined. In some cases, other components of wastewater may interfere with individual measurements, leading to an incorrect non-detection similar to false negatives that can occur from at-home and clinical testing. A non-detect does not necessarily mean that there are no infected individuals within the associated community.

What is the viral gene copy trend line?

The trend line is calculated using Locally Weighted Scatterplot Smoothing (LOWESS), a local regression analysis. It allows us to see the change in trend over time by fitting a curve to the data. This method is useful because it reduces the influence of outliers, and wastewater data can be highly variable. LOWESS is a more complex extension of the moving average.



Does the number of gene copies in a sample tell us how many people are sick?

There are not presently agreed-upon methods for translating concentration of SARS-CoV-2, influenza, or RSV genetic material in wastewater into a measure of how many people, or even what percentage of a community, have COVID-19, flu, or RSV, respectively. Variability between different wastewater sources, treatment facilities, and communities makes it difficult to translate the SARS-CoV-2, influenza, or RSV concentrations into a measure of how many people are infected in the community. However, an upward or downward trend in viral gene copies per liter of wasterwater generally suggests a similar trend in the number of people infected within a given community.

Can I compare the number of gene copies in a sample from site to site?

Because each community has a different mix of wastewater inputs, different populations, and different wastewater systems, it is not appropriate to compare viral gene copy numbers among communities. Instead, trends in SARS-CoV-2, influenza, or RSV concenentrations from a specific community over time can be used to help understand whether cases or hospitalizations are likely to increase or decrease in the community. Sample collection methods and mechanisms, collection times, and sample variability are other factors that discourage cross-site comparison.

Can I compare the gene copies of different pathogens to one another?

Because each pathogen is distinct, it is not appropriate to compare their viral gene copy numbers, even at the same site. Instead, trends in SARS-CoV-2, influenza, or RSV concentrations (increasing/decreasing) can be used to understand if cases or hospitalizations for each pathogen are likely to increase or decrease in the community.

Guide to Interpreting Data on SARS-CoV-2 Lineages in Wastewater Samples

What are lineages and how are they determined?

Wastewater is sequenced to determine the variants of SARS-CoV-2 virus present in a sample, a proxy for circulating variants in the community. Our sequencing strategy utilizes the entire genome of SARS-CoV-2 to identify mutations that are diagnostic of variants of the virus. Full genome coverage gives us better resolution for distinguishing variants, especially those very similar to each other. Variant names and lineage relationships are determined by the World Health Organization (WHO).

Variant: A genome that contains a particular set of mutations.

Mutation: A change in the genetic information introduced during viral replication.

Lineage: A collection of variants all related to each other based on analysis of the virus genomic sequence.

What is the sequencing plot showing me?

This plot is displaying the relative abundance, or proportion, of lineages found in a wastewater sample collected on a particular date. This plot was generated after comparing sample sequences to a SARS-CoV-2 reference genome and identifying characteristic mutations that are



associated with different variants. We then calculate the percentage of each variant present in the sample. This plot summarize the variant detections; lineages are displayed, as there are often many variants detected that are in the same lineage.

What do the results mean?

The SARS-CoV-2 variants identified in a particular plant's wastewater can provide insight into the variants circulating in the population that the plant serves. This information can be useful, as there tend to be fewer clinical sequences, and those might only reflect a small proportion of the community feeling sick enough to pursue testing. The wastewater samples passively capture the virus shed in wastewater from the community where the wastewater was collected, not just those who are symptomatic. Wastewater data is not interpreted in isolation but rather considered alongside other public health metrics.

Does the number or type of lineages tell us how many people are sick?

We cannot tell how many people are sick from the lineages observed in the wastewater. We can only see relative proportions of the variants that are present in the community served by the wastewater treatment plant. We do pay attention to specific mutations that have been identified as having clinical implications (e.g., for effectiveness of medications or disease severity).

Can I compare the lineages in a sample from site to site?

Yes. We often detect variants in a particular plant first, and then see the relative abundance change over time, with certain lineages becoming more prevalent across the state from plant to plant. We compare these detections to sequence data from across the United States and the world.

Why are the dates of the sequencing data not as current as the gene copies data?

Sequencing results are available about two weeks after sample collection. This is because the quantification of SARS-CoV-2 levels by dPCR happens first, and then genetic material (RNA) is sent for sequencing. Additionally, samples then take multiple days to run on the sequencer and computational processing of sequences takes additional time before results are available.

Why do the lineages in the legend change periodically?

The lineages shown in the sequencing plot of this report are in alignment with the CDC's national genomic surveillance system. As the SARS-CoV-2 virus mutates, new variants emerge. This means there are regularly new variants that contribute to the spread of COVID-19. Some variants will disappear while others will continue to spread and even replace others as the dominant variant. These monthly reports reflect those changes as we continue to monitor for emerging variants of concern.







Dave Gorman

The DRSCW and LDRWC¹, on behalf of its participating members, will file the required Nutrient Implementation Plan (NIP)² with the Illinois EPA by the end of this year. These plans are being developed across Illinois by wastewater treatment plants (WWTPs) that discharge upstream of phosphorous impacted waters. The plans seek to achieve an ecologically protective level of phosphorous in rivers by quantifying inputs from wastewater, stormwater and other sources, and then planning reductions to meet a protective level. The high costs to achieving these reductions will fall on WWTPs. Data shows that locally, 85% of riverine phosphorous comes from WWTPs, with the rest from stormwater and other background sources (state wide 48% is from WWTPS).

What is the ecological protective level of phosphorous in an Illinois River system? We don't yet have an official answer to this critical question. Despite Federal pressure and decades of effort, the Illinois EPA has been unable to develop one. This is not due to a lack of effort. The State has spent the last few decades trying, most recently by forming the Nutrient Science Advisory Committee (NSAC), whose findings we cover in this newsletter. Phosphorus' impact on rivers and aquatic life is extremely complex. Unlike other pollutants, it works indirectly to impact water quality and aquatic organisms. In certain conditions, phosphorous may cause excessive algae

growth that outcompetes other organisms (e.g., fish) for dissolved oxygen. Additionally, the high cost to achieve further phosphorus reductions inevitably makes for an extremely scrutinized regulatory process.

This brings us to NIPs. The NIP process allows WWTPs to identify phosphorus input reductions that they can demonstrate would protect water quality. The DRSCW, along with our partners in the Lower DuPage River, have been working on this problem for a number of years. We have developed a watershed-specific target that would be environmentally protective while also being economically efficient. The questions of how we developed this target, how phosphorous affects rivers, and what is the NIP, are all covered in this focused newsletter.

Our shared NIP is vitally important not only to keep our member WWTPs in compliance with their permits, but also to avoid the otherwise expected adoption of the NSAC reduction target, which would be more than twice as restrictive as our locally-developed target. The NIP provides an opportunity to control our own phosphorous strategy and schedule for the next few decades. As is true for so many things, we are more effective and efficient by working together, and we thank you for your support!

¹ DuPage River Salt Creek Workgroup (DRSCW); Lower DuPage River Watershed Coalition (LDRWC)

²The names NIP and NARP are used in this document synonymously. NIP was the name originally given the plans in local permits, but it evolved into NARP in later permits elsewhere in the state and is often referred to using the latter.

DRSCW — Page 2

PHOSPHOROUS: A DOUBLE EDGED SWORD

Phosphorus is a nutrient that is essential for life. In surface bodies of fresh water, it is particularly important to the growth of aquatic plants, but in excessive quantities it can lead to eutrophication. Phosphorus is often the limiting nutrient in freshwater environments, and even small quantities in rivers and lakes may trigger algal blooms. While elevated phosphorus levels are problematic by themselves, it is the consequences of algal blooms as a result of nutrient-rich water that we are particularly concerned with.

Excessive algal growth has numerous harmful effects on the environment. Best understood is how they affect the Dissolved Oxygen (DO) cycle. Algae release oxygen via

Eutrophication: The enrichment of a body of water with nutrients, particularly phosphorus and nitrogen, leading to excessive aquatic plant growth.

Hypoxic: The absence of adequate dissolved oxygen in an aquatic environment.

Anoxic: Aquatic environments that are depleted of dissolved oxygen. Severe hypoxia.

photosynthesis and consume oxygen as they respire. This cycle tracks with sunlight and leads to hypoxic and, in severe instances, anoxic conditions. Decomposition of algal biomass further contributes to low DO, as the bacteria that consume the dying blooms also consume oxygen. Since fish and aquatic insects require DO to survive, low DO causes die-offs, migrations, and ultimately uninhabitable conditions that constitute violations of State and Federal water quality regulations.

Effects of eutrophication are not limited to the local rivers we discharge to and are responsible for. Massive amounts of nutrients flow downstream from across the Midwest, fueling massive algal blooms in the Gulf of Mexico. The extent of this problem is so large that the US EPA has tasked the states with coming up with "Nutrient Loss Reduction Strategies" to reduce eutrophication in surface waters. By managing this requirement at the local level, watershed-based entities can help to ensure that their tributary rivers in the Mississippi watershed can support aquatic biodiversity, and individual communities and regions can find solutions that best work for themselves. This is the strategy behind the NIP.

In addition to the harmful effects of phosphorus on aquatic life, human health also suffers from eutrophication. Some species of algae release dangerous toxins that require the closure of lakes, rivers, and beaches. Many areas also suffer economic losses. Fisheries are harmed when fish kills occur, tourism is affected when rivers and lakes are filled with unsightly and odorous algae, and property values can be depressed from chronic algal blooms.

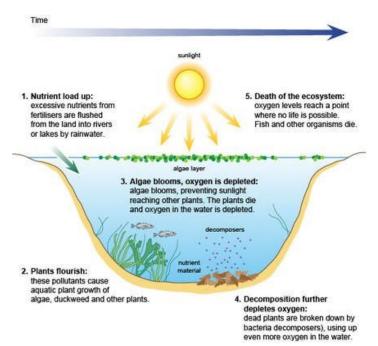


Figure 1. Eutrophication Process and Water Quality Indicies- adapted from Rabar Mohammed Hussein, Bulent Sen, and Feray Sonmez. (2019). International Journal of Engineering Technologies and Management Research, 6(9), 76-83. DOI: 10.5281/zenodo.3475130

Phosphorus is both an important resource and harmful waste product. As such, it requires thoughtful management in its uses, removal and disposal.

NIPS/NARPS: WHAT ARE THEY?

Across Illinois, wastewater treatment plants (WWTPs) are developing Nutrient Assessment and Reduction Plans (NARP) as part of their NPDES permit. In the DRSCW permits, the NARP is referred to as a Nutrient Implementation Plan (NIP). The Illinois EPA requires these plans if the WWTP is located upstream of a waterbody or segment that has been determined to have an impairment related to phosphorus, or to be at risk of eutrophication. WWTPs may work together on a watershed basis to prepare and submit a NARP or they may choose to work individually.

The main objectives of the NARP is to identify phosphorus input reductions from point and nonpoint sources, as well as any other measures necessary to help ensure that dissolved oxygen (D0) and "offensive condition impairments" (excessive aquatic algae and plant growth) standards are met throughout the watershed. Based on Illinois EPA guidance, the NARP should identify a watershed-specific instream target for total

phosphorus (TP) and/or other pollutants. Furthermore, if a watershed-specific TP target were to not be recommended by a NARP, then the TP and TN (Total Nitrogen) targets recommended by NSAC should be utilized. Other measures for improving water quality such as dam removals and stream restoration projects and future studies and monitoring projects can also be considered in the NARP. The NARP should include a schedule for reaching the watershed-specific instream target and other identified measures. The watershed-specific TP target, water quality improvement projects, and future monitoring and studies recommended in the NARP will likely be included by the IEPA in future NPDES permits.

Currently, sixty-six (66) facilities are developing NARPs individually and eighty-six (86) facilities are developing NARPs as part of a watershed group. Fifty-seven (57) were found to not meet the criteria necessitating a NARP. The majority of the NARPs are due on December 31, 2023 or December 31, 2024.

WHAT IS PROTECTIVE?: ARRIVING AT A NUMBER

The DRSCW and LDRWC have identified an instream watershed-specific phosphorous target of 0.11-0.28 mg/L as being sufficiently protective of aquatic life to meet the law in Northeastern Illinois. This range was derived from plotting the relationship between the phosphorus concentrations and the fish species observed across hundreds of locations in NE Illinois (see Figure 2).

The analysis revealed the expected pattern of decreasing species diversity and individual fish numbers as phosphorous concentrations increased. The IEPA measures ecological integrity using a biodiversity score called the Index of Biointegrity (IBI) which requires a certain number of high value species be present.. By mapping the state's fish IBI onto our phosphorous concentration/ fish relationship, we identified sites that met the IEPA's IBI goal, and their mean phosphorous concentrations.

These acceptable sites phosphorus concentrations were then used to derive our watershed-specific phosphorus target. Since this range is based on empirical data, we have high confidence that aquatic life will meet the State's IBI figure provided that other habitat/pollution criteria are met.

Our own watershed-specific target is less restrictive than the target put forward by the Illinois Nutrient Science Advisory Committee (NSAC). In 2019, the NSAC suggested the adoption of an integrated water quality standard: for a violation to occur, TP must exceed 0.1 mg/L and sestonic chlorophyll-a (a measure of algae presence) must exceed 25 μ g/L instream concentration. While these numbers are supposed to be used

Occurrence of Fish Species at Various Phosphorus Concentrations in NE Illinois

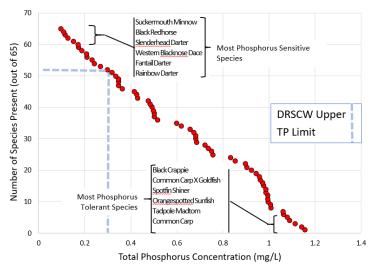


Figure 2. Occurrence of 65 fish species across 640 NE Illinoisan sample sites, ordered by site phosphorous concentrations. The number of fish species supported across the sites decline as the phosphorus concentration increases. The most phosphorus sensitive and tolerant fish are highlighted. Phosphorous concentrations below 0.28 mg/L would be protective of 80% of the species in the study and is sufficient to meet state law (IBI)

in combination, the 0.1 mg/L is often interpreted as a standalone figure and even as a WWTP effluent limit. Our analysis suggests that the NSAC 0.1 mg/L concentration would be overly restrictive, and therefore more expensive, than is necessary to protect aquatic life in our watersheds.

WHAT WILL THE NIP PROPOSE?

The priority recommendation of the DRSCW's NIP will be a TP effluent limit for WWTPs, which along with background dilution, will achieve the instream watershed specific target of 0.11-0.28 mg/L in the watershed's streams and rivers. Options for seasonal limits and various reporting formats (ex. monthly, geometric) are being investigated. The goal will be a TP effluent limit implementation date to be extended to 2035 or later. This schedule will allow our participating WWTPs more time to plan infrastructure upgrades, to benefit from technological advances, and to obtain funding.

The NIP will also continue the DRSCW's adaptive management approach and include physical projects such as stream restoration projects to address specific dissolved oxygen and other habitat related impairments. The NIP may also recommend additional studies and the collection of water quality data to address and monitor DO, nuisance algae and plant growth, and other impairments in DuPage River and Salt Creek watersheds.

DuPage River Salt Creek Workgroup Members and Executive Board

Agency Members (blue)/ Associate Members (gray):

Village of Addison • AECOM • City of Aurora • Village of Arlington Heights • Baxter & Woodman • Village of Bensenville • Black & Veatch • Village of Bloomingdale • Village of Bolingbrook • The Conservation Foundation • Village of Carol Stream • Christopher B. Burke Engineering • Village of Clarendon Hills • Clark-Dietz • Deuchler Engineering • Donohue & Associates • Village of Downers Grove • Downers Grove Sanitary District • DuPage County • City of Elmhurst • Elmhurst-Chicago Stone Company • Engineering Resource Assoc. • Forest Preserve District of DuPage County • Glenbard Wastewater Authority • Village of Glen Ellyn • Village of Glendale Heights • Village of Hanover Park • Hey & Associates • Village of Hinsdale • Village of Hoffman Estates • Huff & Huff • Illinois Department of Transportation • Illinois State Toll Highway Authority • Village of Itasca • Village of LaGrange Park • Village of Lisle • Lisle Township Highway Dept. • Village of Lombard • Metropolitan Water Reclamation District of Greater Chicago • The Morton Arboretum • City of Naperville • Naperville Park District • City of Northlake • Village of Oakbrook • City of Oakbrook Terrace • Village of Palatine • Prairie Rivers Network • Robinson Engineering • Village of Roselle • Salt Creek Sanitary District • Salt Creek Watershed Network • Village of Schaumburg • Sierra Club, River Prairie Group • Stantec • Strand Associates • Village of Streamwood • Trotter & Associates • V3 Companies • Village of Villa Park • City of Warrenville • City of Wood Dale • Village of Woodridge • York Township Highway Department

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Vice President Amy Underwood, Downers Grove Sanitary District

Secretary/Treasurer Rick Federighi, Village of Addison

Members at Large Steven Zehner, Robinson Engineering, Ltd.

Mary Beth Falsey, DuPage County Stormwater Management

Pinakin Desai, Metropolitan Water Reclamation District of Greater Chicago

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Salt Creek Dennis Streicher, Sierra Club—River Prairie Group
East Branch Larry Cox, Downers Grove Sanitary District

West Branch Erik Neidy, Forest Preserve District of DuPage County

Projects Greg Ulreich, Village of Carol Stream

Staff

Director Stephen McCracken, The Conservation Foundation
Watershed Project Manager Deanna Doohaluk, The Conservation Foundation
Administrator Nancy Cinatl, The Conservation Foundation

Environmental Scientist Alex Handel, The Conservation Foundation



DuPage River Salt Creek Workgroup

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