



**OIG**

OFFICE OF INSPECTOR GENERAL

*Catalyst for Improving the Environment*

## **Audit Report**

# **Audit of Costs Claimed Under Construction Grant No. C530614-02 (Carkeek Project) Awarded to King County Department of Natural Resources, Seattle, Washington**

**Report No. 2003-2-00012**

**June 30, 2003**

**Report Contributors:**

Robert Adachi  
Lela Wong  
Melinda Burks  
Charles McCollum

**Abbreviations**

CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
grantee	King County Department of Natural Resources
Metro	Municipality of Metropolitan Seattle
OIG	Office of Inspector General
PWC	Proposed Work Change
Region	Environmental Protection Agency Region 10
State	Washington Department of Ecology



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
INSPECTOR GENERAL

June 30, 2003

**MEMORANDUM**

**SUBJECT:** Report No. 2003-2-00012  
Audit of Costs Claimed Under Construction Grant  
No. C530614-02 (Carkeek Project) Awarded to King County  
Department of Natural Resources, Seattle, Washington

**FROM:** Michael A. Rickey /s/  
Director of Assistance Agreement Audits  
Office of Audit

**TO:** L. John Iani  
Regional Administrator  
EPA Region 10

At your request, we audited the costs claimed by King County Department of Natural Resources for the Carkeek project under EPA Grant No. C530614-02. The project period was from September 22, 1989, to October 30, 1995.

The objectives of the audit were to determine whether:

- The costs claimed were eligible for Federal participation in accordance with the grant terms and conditions and consistent with 40 Code of Federal Regulations (CFR) 35.2250;
- U.S. Environmental Protection Agency (EPA) program officials or their delegated State representatives, Washington Department of Ecology (State), have accepted the project as accomplishing the objectives of the grant; and
- The grantee adhered to the special conditions and fulfilled the material grant performance requirements.

This audit report contains findings that describe the problems the EPA Office of the Inspector General (OIG) has identified and corrective actions the OIG recommends. This audit report represents the opinion of the OIG and the findings contained in this report do not necessarily

represent the final EPA position. Final determinations on matters in this audit report will be made by EPA managers in accordance with established audit resolution procedures.

### **Action Required**

In accordance with EPA Manual 2750, you are required to provide a written response to this report within 120 calendar days of the date of this report. We have no objections to the further release of this report to the public. Please refer to the audit report number on all related correspondence. We will be pleased to provide additional accounting counsel and audit services which may be required in connection with this report and the implementation of our recommendations. For your convenience, this report will be available at <http://www.epa.gov/oigearth/erom.htm>.

If you or your staff have any questions regarding this report, please contact me at (312) 886-3037, Robert Adachi at (415) 947-4537, or Lela Wong at (415) 947-4531.

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## Independent Auditor's Report

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We have audited the final “*Outlay Report and Request for Reimbursement*,” dated December 22, 1999, submitted by the King County Department of Natural Resources (grantee) for the Carkeek project (project) under EPA Grant Number C530614-02. The preparation of the outlay report is the responsibility of King County’s management. Our responsibility is to express an opinion on the “*Outlay Report and Request for Reimbursement*” based on our audit.

We conducted our audit in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States, and the United States generally accepted auditing standards for “*Special Reports*.” These standards require that we plan and perform our audit to obtain reasonable assurance that the costs claimed on the “*Outlay Report and Request for Reimbursement*” are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the “*Outlay Report and Request for Reimbursement*.” An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall claim. We believe that our audit provides a reasonable basis for our opinion.

The “*Outlay Report and Request for Reimbursement*” was prepared by the grantee to report costs and claim reimbursement under Grant No. C530614-02. This claim is not intended to be a complete presentation of the grantee’s revenues and expenses.

In our opinion, except for the costs questioned in Appendix A, the “*Outlay Report and Request for Reimbursement*” referred to above presents fairly, in all material respects, the eligible costs in accordance with the terms and conditions of the grant and the applicable Federal and EPA regulations. Details of our audit are included in the Summary of Results section and in Appendix A.

Robert K. Adachi /s/  
Assignment Manager  
Field Work End: January 15, 2003





## Summary of Results

Category	Amount
Total Costs Claimed (Note 1)	\$14,030,576
Less: Costs Questioned (see Appendix A)	
Ineligible	548,693
Unsupported	154,460
<b>Total Questioned</b>	<b>\$703,153</b>
Eligible Costs (Note 2)	\$13,327,423
EPA's Share of the Eligible Costs (55 percent) (Note 3)	7,330,082
Less: Cumulative Amount Paid to the Grantee	7,691,440
<b>Amount Due EPA</b>	<b>\$361,358</b>

**Note 1:** Total costs claimed represent the total amount claimed by the grantee on the final “*Outlay Report and Request for Reimbursement*” submitted to the Washington Department of Ecology (State) on December 22, 1999.

**Note 2:** The eligible costs represent the total expenditures determined to be eligible for grant participation (amount claimed by grantee minus amounts questioned by OIG) in accordance with the grant terms and conditions, 40 Code of Federal Regulations (CFR) 35.2250, as well as determinations made by the State. Additional details are presented in Appendix A.

**Note 3:** EPA’s share of the eligible costs is computed by applying EPA participation of 55 percent to the total OIG-determined eligible costs.

The State has accepted the project as accomplishing the objectives of the grant. The grantee, in general, adhered to the special conditions and fulfilled the material grant performance requirements, with the exception of the requirement of 40 CFR 35.2212, which requires the grantee to expeditiously initiate and complete the project. The grantee did not award some of the subagreements within 12 months of the grant award, which resulted in limitations on allowable costs. This limitation is referred to as a construction lag penalty. The construction lag penalty on these contracts were calculated by the grantee and accepted by the State. The penalty was included in our computation of the grant eligible costs.

## Recommendations

We recommend that the EPA Region 10 Administrator:

1. Advise the grantee that the costs questioned of \$703,153 are disallowed for grant participation.
2. Obtain recovery of the \$361,358 of Federal funds paid to the grantee in excess of the amounts determined to be allowable.

## Grantee Response

We issued the grantee a draft report on March 4, 2003. The grantee provided a response to the draft report on April 4, 2003. A copy of the grantee's response is included as Appendix C of this report. An exit conference was held with the grantee on April 16, 2003. The grantee's position is that \$439,576 of the questioned costs should be considered eligible. The grantee's responses and the OIG's comment have been summarized in Appendix A.

## Background

The grant was awarded on September 22, 1989, to provide Federal assistance of \$7,249,500 to the Municipality of Metropolitan Seattle (Metro) for construction of an interceptor system and pump stations to reroute water flows to the Carkeek Park Treatment Plant located in North Seattle, Washington, and to perform water quality monitoring activities. The \$7,249,500 represents EPA's 55 percent participation of the eligible project costs; the grantee was responsible for the remaining 45 percent. The grant was subsequently amended to increase the Federal share to \$9,520,150. The State established October 30, 1995, as the cut-off date for the incurrence of costs. On January 1, 1994, Metro merged into King County. Metro became King County's Department of Natural Resources, Wastewater Treatment Division, on January 1, 1996. The grantee submitted a request to the State on December 21, 1999, for final reimbursement of the remaining Federal share of the eligible project costs of \$25,377. The State determined that the grantee had been overpaid by \$174,221. As a result, a final unilateral grant amendment was made on December 6, 2002, to decrease to \$7,691,440 the cumulative Federal assistance paid to the grantee as of December 21, 1999.

The State had sent a request to EPA Region 10 (Region) for a final audit of the project on May 15, 2000. The State had mentioned that the grantee did not provide supporting documentation (e.g., time cards, diaries, etc.) for costs incurred. The State had also questioned the adequacy and completeness of the

grantee's records and supporting documentation at administrative completion time. The State was also concerned that the grantee revised its total costs numerous times, changed the sales tax rates, and did not provide final balancing change orders that adjusted estimated quantities to actual quantities. In addition, the grantee had disagreed with the State's determinations in various areas. The State and the grantee had agreed and signed the final payment contingent upon an audit to verify final eligible costs. As a result, EPA OIG had been requested to audit the final claim.

To assist the reader in obtaining an understanding of the report, key terms are defined below:

**Costs Claimed** Program outlays identified by the grantee on the final "*Outlay Report and Request for Reimbursement*"

**Costs Questioned** Adjustments made by the OIG because the costs claimed are unsupported (not supported by adequate documentation) or ineligible (incurred and claimed contrary to a provision of law, regulation, or grant terms and conditions).



**Construction Grant No. C530614-02: Carkeek Project  
Schedule of Costs Claimed and the Results of Audit  
For the Period September 22, 1989, to December 21, 1999**

<b>Cost Category</b>	<b>Costs Claimed (Note 1)</b>	<b>Ineligible Costs</b>	<b>Unsupported Costs</b>	<b>Reference</b>
Construction Cost				
W/F1-90 (interceptor)	\$2,241,755	\$93,156		Note 2
W/F51-91 (landscape)	324,547	229,517		Note 3
W/F3-92 (pump station)	7,431,031	124,810		Note 4
W/F2-90 (pipeline)	3,687,107	76,906		Note 5
W/F10-91 (civil preparation)	129,840	10,843		Note 6
<b>Total Construction Costs</b>	<b>\$13,814,280</b>	<b>\$535,232</b>		
Water Quality Monitoring	\$216,296	\$13,461	\$154,460	Note 7
<b>Total Project Costs</b>	<b>\$14,030,576</b>	<b>\$548,693</b>	<b>\$154,460</b>	

**Note 1:** Total costs claimed represent the total amount claimed by the grantee on the final “*Outlay Report and Request for Reimbursement*” submitted to the State on December 22, 1999.

**Note 2:** Ineligible costs of \$93,156 represent the difference between the amount claimed by the grantee of \$2,241,755 and the eligible amount of \$2,148,599 as determined under 40 CFR 35.2550. Under 40 CFR 35.2550, EPA will determine the allowable project costs based upon the scope of the project, approved change orders, and the provision of 40 CFR, Subpart I, Appendix A.

Based upon the State’s determination of August 3, 1990, and subsequent change order approvals, the eligible costs were determined to be \$2,148,599. Details of our calculations are shown in the following table:

Description	Amount
Base Contract Amount	\$2,315,252
Less: Ineligible Base Contract Costs (a)	(224,132)
<b>Subtotal</b>	<b>\$2,091,120</b>
Add : Change Orders	79,549
Less: Ineligible Change Order Costs (b)	(22,070)
<b>Total Allowable Construction Costs</b>	<b>\$2,148,599</b>

(a) The ineligible base contract costs of \$224,132 were based upon the August 3, 1990, determination that the project is grant eligible, with the exception of the following limitations on pavement restoration:

Concrete pavement	43,140 square feet
Concrete curb	4,178 lineal feet
Asphalt-concrete pavement	37,078 square feet

The \$224,132 was computed based on actual quantities used on the project. Details of our computation are shown below:

Item Description	Amount
Concrete pavement	\$131,086.92
Grade prep for pavement	49,288.68
Concrete curb	3,710.00
Concrete driveway 6"	4,119.20
Concrete driveway 8"	3,922.32
Concrete sidewalk 4"	7,817.55
Concrete thick edge	7,201.50
<b>Total ineligible amount before sales tax</b>	<b>\$207,146.17</b>
Sales tax (8.2 percent)	16,985.99
<b>Total Ineligible Amount With Sales Tax</b>	<b>\$224,132.16</b>

### Grantee Response

The grantee concurred with the costs questioned.

(b) The ineligible change order amount of \$22,070 was based on the State's determination that the following Proposed Work Change (PWC) tasks were not part of the eligible scope of work:

Change Order	Ineligible Tasks	Ineligible Amount
3	PWC 15	\$ 5,737.64
4	PWC 17	5,240.00
4	PWC 18	945.00
4	PWC 19	8,475.00
<b>Ineligible amount before sales tax</b>		<b>\$20,397.64</b>
Sales tax (8.2 percent)		1,672.61
<b>Total</b>		<b>\$22,070.25</b>

### Grantee Response

The grantee concurred with the State's determination on PWCs 15 and 18, but did not concur with the determination on PWCs 17 and 19. The grantee stated that the work completed under PWC 17 was not for rework as noted in the State's letter dated May 11, 2000. The PWC was for modifications to a catch basin shown in the original scope of work. The catch basin scope of work was eligible for grant participation in the base contract. The grantee considers modifications contracted for in PWC 17 eligible for grant participation.

The grantee stated the work completed under PWC 19 was not an operation and maintenance activity as noted in the State's letter dated May 11, 2000. The PWC was for modification to the sludge loading systems. The existing sludge loading system required modification so that it could maintain operation during modification to the treatment plant. The grantee's position is that the modification on the sludge loading system would not have been required if the grantee was not making modification to the main Carkeek Treatment Plant. The grantee considers modifications contracted for in this PWC eligible for grant participation.

### OIG Comment

The OIG's position remains unchanged. The ineligible costs are based on the State's change order approvals. No revision to the approvals has been made by the State or the Region. As a result, the costs remain questioned. Also, the grantee has raised technical issues that may require further evaluation by the State and the Region during the resolution of the audit.

**Note 3:** Ineligible costs of \$229,517 represent the difference between the amount claimed by the grantee of \$324,547 and the eligible amount of \$95,030 as determined under 40 CFR 35.2550.

Based upon the State’s determination of August 16, 1991, and subsequent change order approvals, the eligible costs were determined to be \$95,030. Details of our calculations are shown below:

Description	Amount
Eligible Base Contract Amount (a)	\$97,060
Eligible Change Orders	317
<b>Total Eligible Construction Costs</b>	<b>\$97,377</b>
Construction Lag Penalty	97.59 percent
<b>Total Allowable Construction Cost</b>	<b>\$95,030</b>

(a) On August 16, 1991, the State determined that the only element of the contract eligible for grant participation was Bid Item B, up to 285,584 square feet (or 31,731 square yards) of total asphalt pavement. Based on the contractor’s final progress payment, a lump sum amount of \$97,060 was paid for Bid Item B, asphalt pavement.

Subsequently, the State issued another determination on September 24, 1999, and stated:

*Reference ineligible items as described in August 16, 1991 approval letter, and construction lag.*

The only eligible item in the August 16, 1991, determination was for Bid Item B. However, the State’s September 24, 1999, letter stated that \$315,377 was eligible for grant participation. No documentation supporting the \$315,377 was available. Since the September 24, 1999, determination confirmed that only Bid Item B was eligible, only \$97,060 can be allowed for grant participation.

**Grantee Response**

The grantee did not concur with our determination that only Bid Item B is eligible for grant participation. The grantee stated that the work was transferred from another contract in which the work was eligible for grant participation, therefore, the work should also be eligible in this contract. The grantee believes that the State’s September 24, 1999 determination to allow \$315,377 (or \$323,165 less construction lag penalty) for grant participation was correct and that this approval was incorporated in the close-out documentation submitted to the Region on October 12, 1999.



## OIG Comment

OIG maintains its position that the State's original determination was made based upon the plans, specifications, and other relevant construction bidding information. The September 1999 determination also appears to affirm the original determination in terms of the allowable bid item.

**Note 4:** Ineligible costs of \$124,810 represent the difference between the amount claimed by the grantee of \$7,431,031 and the eligible amount of \$7,306,221 as determined under 40 CFR 35.2550.

Based upon the State's determination on September 24, 1999, and change order approvals, the eligible costs were determined to be \$7,306,221. Details of our calculations are shown in the following table:

Description	Amount
Base Contract Amount	\$7,358,682
Less: Ineligible Base Contract Costs (a)	(275,682)
<b>Subtotal</b>	<b>\$7,083,000</b>
Add: Change Orders	477,822
Less: Ineligible Change Order Costs (b)	(254,601)
<b>Total Allowable Construction Costs</b>	<b>\$7,306,221</b>

(a) The grantee concurred with the determination on the ineligible base contract costs. Therefore, it is not necessary to include details regarding this amount.

(b) The ineligible change order costs of \$254,601 consist of the following:

<b>Change Order</b>	<b>Ineligible Items/Tasks</b>	<b>Ineligible Amount</b>
2	Construction management software	\$5,288.21
3	Clean-up of trail	2,903.00
6	Flood damage repairs and backhoe/op to support Seattle Conservation	12,472.00
7	PWC 5 (aesthetic value)	1,166.00
8	Gate valve installed for future connections to waterline	917.00
10	Bar screen modifications costs increased due to grantee's changes	20,236.00
12	PWC 49 (rework)	2,025.00
15	PWCs 56 and 76 (maintenance), and PWC 70 (rework)	45,733.00
16	PWCs 75, 77, 80, and 81 (rework)	3,402.00
18	PWC 42 (rework) and PWC 84 (maintenance/cleanup)	31,186.00
21	PWC 87 (rework and additional restroom)	3,026.00
22	Perimeter screening addition and east trail realignment work	76,582.00
23	PWCs 65 and 68 (outside the scope of work), and PWC 72 (rework)	5,560.00
24	PWC 107A (east trail increased scope), PWC 108 (outside the scope of work), and PWC 112 (rework)	15,252.00
25	PWCs 110 and 114 (signage change and additional rock for trail were outside the scope of work)	2,119.00
<b>Ineligible amount before sales tax</b>		<b>\$227,867.21</b>
Sales tax (8.2 percent)		18,685.11
<b>Total ineligible change order amount before construction lag</b>		<b>\$246,552.32</b>
Construction lag penalty (3.48 percent of eligible construction costs of \$213,742.35, plus sales tax of 8.2 percent)		8,048.18
<b>Total ineligible change order amount</b>		<b>\$254,600.5</b>

### **Grantee Response**

The grantee did not concur with the ineligible determinations in connection with change orders 12, 18, 21, 22, 23, and 24. A comparison of the grantee's and the State's ineligible amounts for these change orders are shown in the following table:

Change Order	Ineligible Per the Grantee	Ineligible Per the State	Difference	Reference
12	\$0	\$2,025	\$2,025	(a)
18	743	31,186	30,443	(b)
21	2,800	3,026	226	(c)
22	0	76,582	76,582	(d)
23	3,364	5,560	2,196	(e)
24	7,217	15,252	8,035	(f)
<b>Total</b>	<b>\$14,124</b>	<b>\$133,631</b>	<b>\$119,507</b>	

**Reference (a).** The grantee stated that the \$2,025 for the work completed under PWC 49 of Change Order number 12 was eligible for grant participation. The work completed under this PWC was not for rework as noted in the State’s May 11, 2000, letter. The change was required to replace the pump impellers with a full-size (not trimmed) impeller because the engineers discovered that the impellers provided in the original design would not meet the system requirements. The change was required to meet the design conditions for contract performance, not for rework.

**Reference (b).** The difference of \$30,443 was related to PWC 42. The grantee explained that the work completed under this PWC was not a change in the scope of work as noted in the State’s May 11, 2000, letter. The original contract had the main tank collector system removed and replaced with a nonmetallic system. Part of the original metal chain system was to stay in place. During construction, the grantee realized that this metal chain would be exposed to the outside elements because the new plant configuration would be for intermittent operations and tank draining. This required an increase in the plant scope to provide for the proper gear to be supplied to meet the project operating requirements. The grantee said the State’s eligibility letter for this contract allowed the clarifier equipment to be eligible for grant participation. This PWC was for a change from steel to plastic chain because when the plant was not in a storm water mode, the originally specified steel chain would deteriorate when exposed to open air condition. This was a material change and not a change in scope of work, therefore, should be eligible for grant participation.

**Reference (c).** The grantee agreed with the ineligibility of PWCs 87 and 90, but did not concur with the amount associated with these tasks. The grantee believes the total ineligible amount for PWCs 87 and 90 should be \$2,800, not \$3,026.

**Reference (d).** The grantee did not concur with the ineligibility determination of \$76,582. This amount was for PWC 102 (perimeter screening addition) and PWC

107 (trail relocation). The grantee considers work completed under these PWCs as allowable mitigation costs under 40 CFR 35, Subpart I, Appendix A (Determination of Allowable Costs). Allowable mitigation costs include:

*B. Mitigation 1. Allowable costs include:*

- b. The costs of site screening necessary to comply with NEPA (National Environmental Policy Act) related studies and facilities plan, or necessary to screen adjacent properties.*

The grantee did not agree with the State's May 11, 2000, determination that the mitigation items were ineligible for grant participation. The grantee considers both PWCs to be eligible for grant participation since the work was for plant security, which is normally an eligible component in treatment plant construction.

The grantee stated that PWC 102 was for perimeter screening. The PWC revised the scope of work to cover the removal of an existing fence. Plants were placed on the south side of the treatment plant, providing screening from adjacent properties, while also providing security for the south side of the plant. PWC 107 was for trail relocation needed when the access to the north end of the trail was required. This issue was not addressed during initial design and was not a part of mitigation. The trail had to be relocated on the south side of the stream to allow for enough road alignment to the new access at the north end of the plant. This change was required to maintain the scope of the original trail system that previously existed.

**Reference (e).** The grantee did not concur with the ineligible amount of \$2,196 under the change order. The grantee stated that the need for a location for the new cabinets required rework of the available space and an adjustment to gear being installed by the contractor. Since all equipment sizes are not known at the time of the design, and the building space was existing, movements before installation were required to make the necessary component systems fit in the available space. The grantee considered the work eligible for grant participation.

**Reference (f).** The grantee did not concur with the ineligible amount of \$8,035 under change order 24. The amount was related to PWCs 107A and 112. The grantee stated that PWC 107A was an extension of PWC 107 in change order 22. The extension was for the security fence encircling the treatment plant site which is eligible for grant participation. PWC 112 was for the control strategy changes made to match the operating characteristics of the variable frequency drives. The control strategy needed to be adjusted to match the design requirements for operating conditions. This was considered an adjustment to match specific equipment needs found at startup time and is eligible for grant participation.

### OIG Comment

The OIG's position remains unchanged. The ineligible costs are based on the State's change order approvals. No revisions to the approvals have been made by the State or the Region. As a result, the costs will remain questioned. Also, the grantee has raised technical issues that may require further evaluation by the State and the Region during the resolution of the audit.

**Note 5:** Ineligible costs of \$76,906 represent the difference between the amount claimed by the grantee of \$3,687,107 and the eligible amount of \$3,610,201 as determined under 40 CFR 35.2550.

Based upon the State's determination of March 6, 1991, and subsequent change order approvals, the eligible costs were determined to be \$3,610,201. Details of our calculations are shown in the following table:

Description	Amount
Base Contract Amount	\$4,065,579
Less: Ineligible Base Contract Costs (a)	(475,401)
<b>Subtotal</b>	<b>\$3,590,178</b>
Add : Change Orders	275,962
Less: Ineligible Change Order Costs (b)	(255,939)
<b>Total Allowable Construction Costs</b>	<b>\$3,610,201</b>

(a) The ineligible base contract costs of \$475,401 were based upon the State's March 6, 1991, determination that seven tasks were ineligible. The actual amount the grantee spent on each of the bid items associated with these seven tasks is listed below:

Bid Item	Unit Price	Ineligible Quantity	Ineligible Amount
Mobilization		Lump Sum	\$10,000.00
Rock Weirs-Sediment/Gravel	\$1,000.00	13	13,000.00
SD Structure	\$2,478.55	13	32,221.15
SD Structure-8th Ave NW	\$2,478.55	8	19,828.40
Concrete Pavement 9"	\$32.50	3,473	112,883.33
Concrete Driveway	\$31.50	320	10,080.00
Sidewalk	\$14.70	862	12,671.40
Curb	\$8.00	1,484	11,872.00
Temp Asphalt Patch		Lump Sum	27,000.00
Class B Asphalt	\$60.00	930	55,800.00
Asphalt-Treated Base	\$40.00	1,670	66,800.00
Replace HM Frame/Cover	\$293.20	5	1,466.00
Bldg. #6 Cement Conc. Pavement	\$55.00	250	13,750.00
Bldg. #7 Relocate Side Sewers	\$40.00	300	12,000.00
Bldg. #8 Furnish/Install 8" Water Line		Lump Sum	40,000.00
<b>Total ineligible costs before sales taxes</b>			<b>\$439,372.28</b>
Sales tax (8.2 percent)			36,028.53
<b>Total ineligible costs</b>			<b>\$475,400.81</b>

### Grantee Response

While the grantee concurred with how the State computed the ineligible costs, they did not agree with the inclusion of the total cost for the following five bid items as an ineligible cost under the base contract.

Bid Item	Unit Price	Ineligible Quantity	Ineligible Amount
<b>SD Structure-8th Ave NW</b>	\$2,478.55	8	\$19,828.40
Class B Asphalt	60.00	930	55,800.00
Asphalt-Treated Base	40.00	1,670	66,800.00
Replace <b>HM</b> Frame/Cover	293.20	5	1,466.00
<b>Bldg. #7</b> Relocate Side Sewers	40.00	300	12,000.00
<b>Total</b>			<b>\$155,894.40</b>

The grantee believed that only \$90,064 of the five bid items were ineligible, consisting of:

Bid Item	Unit Price	Ineligible Quantity	Ineligible Amount
SD Structure-8th Ave NW	\$2,478.55	6	\$14,871.30
Class B Asphalt	\$60.00	827	49,620.00
Asphalt-Treated Base	\$40.00	580	23,200.00
Replace HM Frame/Cover	\$293.20	4	1,172.80
Bldg. #7 Relocate Side Sewers	\$40.00	30	1,200.00
<b>Total</b>			<b>\$90,064.10</b>

**OIG Comment**

OIG’s position remains unchanged. The grantee needs to provide a determination from the Region or the State that supports the partial eligibility of the five bid items at issue or contradicts the March 6, 1991, determination.

- (b) The ineligible change order amount of \$255,939 included \$71,793.62 (or \$66,352.70 plus 8.2 percent sales tax) from change order number 3 for repair of the existing gravity sewer line. (Since the grantee only took issue with the \$71,793.62, we are not providing details on the remaining portion.)

**Grantee Response**

The grantee did not concur with the determination that the \$71,793.62 associated with PWC 8 of change order number 3 was ineligible. The grantee said the work completed under this PWC was not an operating and maintenance activity or repair to an existing line as noted in the State’s May 11, 2000, letter. The change order was for the cost of lining an existing sanitary sewer line. When the project was designed, the line was determined to be adequate for the needs of the new system requirements. However, during construction, when the line was exposed and a closer inspection was made, it was determined that the line was not adequate to meet the new system requirements. It was then determined that the liner would provide the necessary seals to provide a tight system for odor control originally included in the scope of work. The grantee considers modifications contracted for in this PWC eligible for grant participation.

**OIG Comment**

The OIG’s position remains unchanged. The ineligible costs are based on the State’s change order approvals. No revision to the approvals has been made by the State or the Region. As a result, the costs remain questioned. Also, the

grantee has raised technical issues that may require further evaluation by the State and the Region during the resolution of the audit.

**Note 6:** Ineligible costs of \$10,843 represent the difference between the amount claimed by the grantee of \$129,840 and the eligible amount of \$118,997 as determined under 40 CFR 35.2550.

Based upon the State's determination of March 21, 1991, and subsequent determinations, the eligible costs were determined to be \$118,997. Details of our calculations are shown in the following table:

Description	Amount
Base Contract Amount	\$254,315
Less: Ineligible Base Contract Costs (a)	(145,512)
<b>Subtotal</b>	<b>\$108,803</b>
Add : Change Orders	22,409
Less: Ineligible Change Order Costs (b)	(12,215)
<b>Total Allowable Construction Costs</b>	<b>\$118,997</b>

- (a) The grantee concurred with the determination on the ineligible base contract costs. Therefore, it is not necessary to include details regarding this amount.
- (b) The ineligible change order costs of \$12,215 consist of the following change orders:

Change Order	Amount
1	\$500.11
2	4,897.14
3	(3,222.47)
4	9,449.87
<b>Total ineligible before sales taxes</b>	<b>\$11,624.65</b>
Sales tax (4.27 percent)	496.37
<b>Total ineligible construction costs before construction lag</b>	<b>\$12,121.02</b>
Construction lag penalty (0.91 percent of the eligible change order amount of \$9,866.21 plus sales tax of 4.27 percent)	93.61
<b>Total Ineligible costs</b>	<b>\$12,214.63</b>



## Grantee Response

The grantee did not concur with \$2,869 of the \$11,624.65 ineligible costs before sales tax and the construction lag penalty. The \$2,869 is associated with PWCs 2 and 3 under change order number 4, which the State determined to be ineligible. The grantee considers these tasks eligible for grant participation for the following reasons:

PWC 2 Item 1 (\$1,008 plus sales tax) - This change was for the alignment and extension of the sidewalk required to match the new face of the curb after construction. The change was to restore the site to its original condition as allowed by 40 CFR 35, Subpart I, Appendix A, Section D.1.d(3), thereby costs should be eligible for grant participation.

PWC 2 Item 5 (\$1,256 plus sales tax) - This change was for the alignment of the guardrail to match the new face of the curb. The change was to restore the site to its original condition as allowed by 40 CFR 35, Subpart I, Appendix A, Section D.1.d(3), thereby costs should be eligible for grant participation.

PWC 3 Item 4 (\$605.39 plus sales tax) - This change was a requirement for the city electrical utility to change the type of lid on the electrical handhold box. The change was required by the utility and should be considered eligible for grant participation.

It should be noted that the grantee originally did not concur with \$5,091.80 of the \$11,624.65 ineligible costs in its response to our draft report. The grantee subsequently revised its position during a meeting with the OIG. The responses summarized above reflect the grantee's revised position on this note.

## OIG Comment

The OIG's position remains unchanged. The ineligible costs are based on the State's change order approvals. No revision to the approvals have been made by the State or the Region. As a result, the costs will remain questioned.

**Note 7:** Costs questioned consist of ineligible costs of \$13,461 and unsupported costs of \$154,460.

(c) The ineligible amount of \$13,461 represents the difference between the claimed amount of \$216,296 and the maximum allowable amount of \$202,835 under the grant. Special Condition 20 of the grant required the grantee to establish and conduct a water quality testing program to measure and document water quality before and after construction of the project. The grant included \$240,000 for the water quality survey. However, the grantee could only identify costs incurred of \$237,234 for the water quality monitoring project. Under 40 CFR, Part 35,

Subpart I, Appendix A.H.2.h, the allowable water quality monitoring amount is limited to the amount allocable to the eligible portion of the project. Based upon the eligible construction percentage of 85.50 percent, the maximum allowable costs for water quality monitoring would be \$202,835.

**(b)** The unsupported costs questioned consists of \$23,850 of fringe benefit costs and \$130,610 of non-force account costs.

**(i)** Unsupported costs questioned of \$23,850 represent the maximum allowable fringe benefit costs incurred in connection with water quality monitoring under 40 CFR, Part 35, Subpart I, Appendix A.H.2.h, as explained above. According to 40 CFR 30.500, the grantee is required to maintain records to identify amounts expended for the project. While we were able to verify the actual fringe benefit costs incurred, the grantee was unable to provide adequate explanations or documentation supporting the methodology used to allocate the fringe benefit costs to each cost objective. As a result, the maximum allowable fringe benefit costs of \$23,850 are being questioned as unsupported.

**(ii)** Unsupported costs questioned of \$130,610 represents the maximum allowable non-force account costs incurred in connection with water quality monitoring under 40 CFR, Part 35, Subpart I, Appendix A.H.2.h, as explained above. The non-force account costs include Outside Temp, Other Professional Services, Outside Repair, Miscellaneous General Operating Costs, Lab Supplies and Contract Labor. These costs were paid through accounts payable. Due to the grantee's record retention policy, all accounts payable records were routinely destroyed every seven years. As a result, the maximum allowable non-force account costs of \$130,610 will be questioned as unsupported in accordance with 40 CFR 30.500.

### **Grantee Response**

The grantee concurred with the costs questioned. The grantee will continue to search for the supporting documentation and will submit them during the audit resolution process.

## Scope and Methodology

The audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States, and auditing standards established by the American Institute of Certified Public Accountants for “*Special Reports*” (SAS 62). These standards require that we plan and perform our audit to provide reasonable assurance about whether the “*Outlay Report and Request for Reimbursement*” is free of material misstatement. This requires examining, on a test basis, evidence supporting the costs claimed. We also obtained a sufficient understanding of the grantee’s internal control structure to determine the nature, timing, and extent of tests to be performed to reach an opinion on the costs claimed. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall claim. We believe that our audit provides a reasonable basis for our opinion.

The audit field work was performed between March 1, 2002, and January 15, 2003. We did not perform any followup of prior audit reports. The following steps were performed to determine whether costs incurred were eligible for grant participation:

- We reviewed the grant files at EPA Region 10 and the State.
- Eligibility was determined using the supporting documentation obtained from the State’s grant files:
  - < The grantee’s construction lag calculations dated June 21, 1994.
  - < The State’s various eligibility determination letters.
  - < The State’s letters describing approval of contract change orders.
  - < The State’s change order eligibility re-evaluation dated May 11, 2000.
  - < Bid approval for each of the construction contracts.
- We visited the grantee and obtained the following documents:
  - < Final progress payment for each of the construction contracts.
  - < Original claim, along with supporting spreadsheet, the grantee submitted to the State on December 21, 1999.
- We reconciled the grantee’s original claim, along with the spreadsheet supporting the claim, to Metro’s accounting system reports. This accounting system was eliminated when Metro merged with the grantee. Since we were unable to test the controls in the accounting system, we assumed maximum control risk and tested all transactions.
- We verified all progress payments against the payment vouchers and copies of the check to confirm actual payment to the contractors. To address the State’s concerns about the lack of balancing change orders, the final payment to each contractor was reviewed to

ensure that only the final unit quantities were reimbursed by the grantee. We also verified that no costs were incurred prior to the Notice to Proceed date and that all retention amounts were released to the contractors prior to the final claim.

- Construction lag penalty was then applied to the eligible amounts of the base contract and change orders for the following three contracts:

<u>Contract No.</u>	<u>Description</u>	<u>Construction Lag</u>
W/F51-91	8 <sup>th</sup> Avenue NW Landscape	97.59 percent
W/F3-92	Pump Station	96.52 percent
W/F10-91	Civil Preparation	99.09 percent

- Sales tax was applied and added to come up with totals for each contract. The sales tax represents the actual average tax rate paid to the contractors. The State of Washington does not have sales tax exemption for Government contractors.
- The eligible water monitoring amount was computed by multiplying the eligible costs incurred by the ratio of eligible construction costs to total construction costs incurred. A random sample of the force account costs was verified to labor distribution reports, payroll input reports, and a few time sheets. The random sample was selected based upon a critical error rate and maximum risk rate of 10 percent.

### **Control Risks and Criteria**

In planning and performing our audit, we considered relevant aspects of the internal control structure to determine our auditing procedures. For these internal controls, we obtained an understanding of the relevant policies and procedures during the period of the project.

We did not examine the accounting system because the system utilized during the project is no longer in existence. Reports generated from the accounting system were used in the verification of transactions, but no tests of the adequacy of the system were performed. As a result, other than the water quality monitoring costs, we assumed maximum control risk and tested all transactions for verification of payments. As explained above, only a random sample of the water quality monitoring costs was tested.

For all tested transactions, we examined the source documents and performed other audit procedures we considered necessary to gain an understanding of the grantee’s financial management and contract administration controls. As criteria, we used 40 CFR, Parts 30 and 35; and Office of Management and Budget Circulars A-87 (Cost Principles for State, Local and Indian Tribal Governments) and A-102 (Grants and Cooperative Agreements With State and Local Governments). Our review did not disclose any material weaknesses in the grantee’s financial management or contract administration systems.

# Grantee Response



**King County**

**Wastewater Treatment Division**

Department of Natural Resources and Parks  
King Street Center  
201 South Jackson Street  
Seattle, WA 98104-3855

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April 4, 2003

Ms. Janet Kesler OMP-145  
U. S. Environmental Protection Agency—Region 10  
1200 Sixth Avenue  
Seattle, WA 98101

Re: Response to Draft Audit Report  
Final Audit Costs Claimed For Grant No. C530814-02  
Carkeek Transfer/CSO Facilities Project

*4. OK 4/9/03*

Dear Ms. Kesler:

Thank you for the opportunity to respond to the draft audit report for EPA Grant No. C530814-02 dated March 4, 2003. King County Wastewater Treatment Division (WTD) received a copy of the draft audit report on March 5, 2003.

*9/4*

Enclosed is WTD's response to the findings in the draft audit report. As discussed in the response, the majority of the findings are related to eligibility regarding technical issues.

WTD is requesting an exit conference to discuss the report on:

Date: **Wednesday, April 16, 2003**  
Time: 9:30 A.M.  
Location: Wastewater Treatment Division  
201 South Jackson Street  
Seattle, Washington 98104  
Conference Room: 8-H 8<sup>th</sup> Floor

We are looking forward to resolving these issues. If you have any questions, please contact Linda Biarum, Grants Administrator, at 206-684-1030.

Sincerely,

Robert Hirsch  
Government Relations Administrator

Enclosure

cc: Linda Biarum, King County Wastewater Treatment Division



CLEAN WATER - A SOUND INVESTMENT

**King County Wastewater Treatment Division  
Response To Draft Audit Report Dated March 4, 2003  
Carkeek Transfer/CSO Facilities Project  
EPA Grant No. C530814-02**

On March 5, 2003, King County Wastewater Treatment Division (WTD) received a copy of the above named draft audit report dated March 4, 2003. WTD has reviewed the draft audit report and is submitting its response as requested.

Listed below is WTD's response to the individual findings.

**Contract W/F 1-90 Audit Report Note 2**

**Base Contract**

After review and analysis of the specific contract drawings relating to the grade prep, the grantee concurs with the auditor's finding. The \$49,288.68 plus sales tax of 8.2 percent (\$53,265) associated with grade prep is ineligible for grant participation. Thereby, the grantee agrees with the EPA auditor's recommended amount of \$224,132.16 as ineligible within the base contract.

**Change Order No. 4**

*PWC No. 17* (\$5,240.00 plus sales tax)

The grantee does not concur with the determination previously provided by the Department of Ecology. Work completed under this PWC was not for rework as noted in the Department of Ecology letter dated May 11, 2000, from Bernard Jones.

PWC 17 was for modifications to a catch basin shown in the original scope of work. The catch basin scope of work was eligible for grant participation in the base contract. The grantee considers modifications contracted for in PWC 17 eligible for grant participation.

*PWC No. 19* (\$8,475.00 plus sales tax)

The grantee does not concur with the determination previously provided by the Department of Ecology. Work completed under this PWC was not an O&M activity as noted in the Department of Ecology letter dated May 11, 2000, from Bernard Jones.

PWC 19 was for modifications to the sludge loading systems. The existing sludge loading system required modification so that it could maintain operation during modification to the treatment plant. The grantee's position is that the modification on the sludge loading system would not have been required if grantee were not making modification to the main Carkeek Treatment Plant. The grantee considers modifications contracted for in this PWC eligible for grant participation.

**Contract W/F 51-91 Audit Report Note 3**

**Base Contract**

The grantee does not concur with the audit report that only Bid Item B is eligible for grant participation. Work was transferred from another contract in which the work was eligible for grant participation and therefore should be eligible in this contract. The grantee concurs with Ecology's later determination that \$323,165 was eligible for grant participation less construction penalty lag. Ecology revised approval was incorporated in the close out documentation submitted to EPA on October 12, 1999, as revised.

**Contract W/F 3-92 Audit Report Note 4**

**Change Order 12**

*PWC No. 49* (\$2,025 plus sales tax)

The grantee does not concur with the determination previously provided by the Department of Ecology. Work completed under this PWC was not rework as noted in the Department of Ecology letter dated May 11, 2000, from Bernard Jones.

**King County Wastewater Treatment Division  
Response To Draft Audit Report Dated March 4, 2003  
Carkeek Transfer/CSO Facilities Project  
EPA Grant No. C530814-02**

The change was required to replace the specific pump impellers. The engineer discovered that the impellers provided in the original design would not meet the system requirements. What was needed was a full size (not trimmed) impeller. This was to ensure the correct size of impeller was installed. The change was not rework, the full size impeller was required to meet the design conditions for contract performance.

**Change Order 18**

*PWC No. 42* (\$30,443 plus sales tax)

The grantee does not concur with the determination previously provided by the Department of Ecology. Work completed under this PWC was not a change in the scope of work as noted in the Department of Ecology letter dated May 11, 2000, from Bernard Jones.

The original contract had the main tank collector system removed and replaced with a non-metallic chain system. Part of the original metal chain system was to stay in place. During construction it was realized that this metal chain would be exposed to the outside elements because the new plant configuration would be for intermittent operations and tank draining.

The eligibility letter from WDOE for this contract allowed the clarifier equipment to be eligible for grant participation. This PWC was for a material change from steel to plastic chain because when the plant was not in a storm water mode, the originally specified steel chain would deteriorate when exposed to open air conditions. This was a material change and not a change in scope of work and should be eligible for grant participation.

**Change Order No. 21**

The recap sheet for the eligibility breakdown was listed as \$1,039 and \$3,028. King County agrees with the ineligibility of PWC 87 and 90 that total \$2,800, which leave eligible as \$1,265. The issue is a clarification issue and not a technical difference in the eligibility and should be allowable.

**Changes Order No. 22**

*PWC No. 102 and 107* (\$76,582 plus sales tax)

The grantee does not concur with the determination previously provided by the Department of Ecology. The Grantee considers work completed under these PWCs as allowable mitigation costs as discussed in 40 CFR 35, Subpart I, Appendix A Determination of Allowable Costs, allowable mitigation costs include:

- B. Mitigation 1. Allowable costs include:
  - b. The cost of site screening necessary to comply with NEPA related studies and facilities plan, or necessary to screen adjacent properties.

The Department of Ecology letter dated May 11, 2000, from Bernard Jones, stated these mitigation items were ineligible for grant participation.

PWC 102 was for perimeter screening. The PWC revised the scope of work to cover the removal of an existing fence, and did not install a new fence. Plants were placed on the south side of the treatment plant, providing screening from adjacent properties, while also providing security for the south side of the plant.

PWC 107 is for trail relocation required when the access to the north end of the plant was required. This issue was not addressed during initial design and was not a part of mitigation. The trail had to be

**King County Wastewater Treatment Division  
Response To Draft Audit Report Dated March 4, 2003  
Carkeek Transfer/CSO Facilities Project  
EPA Grant No. C530814-02**

relocated on the south side of the stream to allow for enough road alignment to the new access at the north end of the plant. This change was required to maintain the scope of the original trail system that previously existed.

The grantee has considers that both PWCs are eligible for grant participation since the work was for plant security which is normally an eligible component in treatment plant construction.

**Change Order No. 23**

PWC No. 72 (\$2,196 plus sales tax)

The grantee does not concur with the determination previously provided by the Department of Ecology. Work completed under this PWC was not rework as noted in the Department of Ecology letter dated May 11, 2000, from Bernard Jones.

Once final equipment was available, existing space needed to be adjusted to allow for installation of all new equipment by the contractor. Since all equipment sizes were not known at design time, and the building space was limited, movements within the existing space was required before installation to make the necessary component systems fit in the available space. The grantee considers this work eligible for grant participation since it was required to allow for the supplied equipment to fit within the allotted and available space.

**Change Order No. 24**

PWC No. 107A (5,725 plus sales tax)

The grantee does not concur with the determination previously provided by the Department of Ecology. PWC 107A is an extension of PWC 107 in Change Order No. 22 and is considered eligible by the grantee. The extension of PWC 107 is for the security fence encircling the treatment plant site. This security fence is eligible for grant participation.

PWC No. 112 (\$2,310 plus sales tax)

The grantee does not concur with the determination previously provided by the Department of Ecology. PWC 112 is for control strategy changes made to match the operating characteristic of the VFD drives. The control strategy needed to be adjusted to match the design requirements for operating conditions. This is considered an adjustment to match specific equipment needs found at startup time and is considered eligible by the grantee.

**Contract W/F 2-90 Audit Report Note 5**

**Base Contract**

While the grantee concurred with how the Department of Ecology computed the ineligible costs, they did not agree with the inclusion of total costs for five bid items as ineligible costs under the base contract. The grantee believes that only \$90,064 of the bid items were ineligible for grant participation as discussed in the draft audit report dated March 4, 2003.

**Change Order**

**Change Order No. 3**

PWC No. 8 (\$66,352.7 plus sales tax)

The grantee does not concur with the determination previously provided by the Department of Ecology. Work completed under this PWC was not an O&M activity or repair to an existing line as noted in the Department of Ecology letter dated May 11, 2000, from Bernard Jones.



**King County Wastewater Treatment Division**  
**Response To Draft Audit Report Dated March 4, 2003**  
**Carkeek Transfer/CSO Facilities Project**  
**EPA Grant No. C530814-02**

The change order was for the cost of lining an existing sanitary sewer line. When the project was designed, the line was determined to be adequate for the new system requirements. However, during construction, when the line was exposed and a closer inspection was made, it was determined that the line was not adequate to meet the new system requirements. It was then determined that a painted on liner would provide the necessary seals to provide a tight system for odor control originally included in the scope of work. The grantee considers modifications contracted for in this PWC eligible for grant participation.

**Contract W/F 10-91 Audit Note 6**

The grantee does not concur with \$5,091.80 of the 11,624.65 ineligible costs before sales tax nor the construction lag penalty. The \$5,091.80 is associated with PWC's 2, 3, 5, and 8 under change order No. 4, which the State determined to be ineligible. The grantee considers these tasks eligible for grant participation for the reasons listed below.

**Change Order No. 4**

*PWC No. 2 Item 1* – This change was for the alignment and extension of the sidewalk required to match the new face of the curb after construction. The change was to restore the site to its original condition as allowed by 40 CFR 35, Subpart I, Appendix A, d. Real Property, (4) d.(3), thereby cost should be eligible for grant participation. Eligible costs \$1,008 plus sales tax.

*PWC No. 2 Item 5* – This change was for the alignment of the guardrail to match the new face of the curb. The change was to restore the site to its original condition as allowed by 40 CFR 35, Subpart I, Appendix A, D. Real Property, (4) d.(3), thereby cost should be eligible for grant participation. Eligible costs \$1,256 plus sales tax.

*PWC No. 3 Item 4* – This change was a requirement for the city electrical utility to change the type of lid on the electrical handhold box. The change was required by the utility and should be considered eligible for grant participation. Eligible costs \$605.39 plus sales tax.

*PWC No. 5* – This change was for an increase in price because higher use of bid quantity. The contract allows for price to be reevaluated when the quantity varies by 30 percent in either direction. Ecology approved the contract as written with this clause on January 9, 1992. The additional costs associated with the grant eligible item should be eligible for grant participation. Eligible costs \$6,266 plus sales tax.

*PWC No. 8* – The grantee concurs that this PWC is ineligible for grant participation.

**Water Quality Monitoring Audit Report Note 7**

The audit will review these records prior to finalizing the draft audit report.



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### Headquarters Office

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### Office of Inspector General

Inspector General

### Auditee

King County Department of Natural Resources  
Wastewater Treatment Division