FILE: B-216517 DATE: September 19, 1985

MATTER OF: Centurial Products

## DIGEST:

1. Bid opening is not initial adverse agency action on a protest to an agency where the agency advises the protester that it will consider the protest notwithstanding bid opening, that it will cancel the solicitation if the protest is upheld, and that the procurement will not proceed until the protest is decided. A protest filed with GAO within 10 days after the agency decision is therefore timely.

- 2. A solicitation specifying corrugated metal pipe for a closed conduit waterway, thereby excluding an offer for concrete pipe, is not unduly restrictive where the contracting agency establishes a prima facie case that the requirement is reasonable, based upon a comparative cost analysis, and the protester, although questioning the agency's method of projecting and comparing costs, fails to show that the method is unreasonable.
- Where a protester initially filing a timely protest later supplements it with new grounds of protest, the new grounds must independently satisfy GAO timeliness requirements.

Centurial Products protests the award of a contract to the Beaver Excavating Company under invitation for bids (IFB) No. SCS-16-WV-84, issued August 7, 1984 by the Soil Conservation Service, Department of Agriculture. The IFB called for the installation of a closed conduit waterway on 3,500 feet of tributaries to Pond Run Channel in Wood County, West Virginia. Centurial contends that a requirement for the use of corrugated metal pipe in this project is unduly restrictive and that concrete pipe would be more cost effective.

We deny Centurial's protest in part and dismiss it in part.

Centurial protested to the Soil Conservation Service before bid opening on September 7, 1984, contending that the comparative cost analysis upon which the agency largely based its determination to use corrugated metal pipe was in error. Centurial claimed that the Soil Conservation Service used the wrong method to compare the cost of concrete and corrugated metal pipe, overestimated the cost of concrete pipe, calculated certain fixed costs as variable costs, omitted costs associated with replacing corrugated metal pipe at the end of its service life, and overestimated that service life.

Following receipt of a September 12, 1984 letter denying its protest to the agency, Centurial protested to our Office, again challenging the Soil Conservation Service's method for comparing the relative costs of concrete and corrugated metal pipe. According to Centurial, a proper cost comparison establishes that concrete pipe would be less expensive over the life of the project. By excluding concrete pipe from the Pond Run project, the protester alleges, the Soil Conservation Service unreasonably restricted competition.

As a threshold issue, the agency claims that Centurial's protest to our Office is untimely, since it was not filed until September 24, 1984, more than 10 working days after the September 7 bid opening. The agency relies upon the rule that if a protest is filed initially with the contracting agency, any subsequent protest to our Office must be filed within 10 working days of initial adverse agency action. 4 C.F.R. § 21.2(b)(2) (1984). An agency's opening of bids without correcting allegedly restrictive specifications generally constitutes initial adverse agency action. Silent Hoist & Crane Co., Inc., B-216826, Oct. 29, 1984, 84-2 CPD ¶ 477.

We believe the protest is timely. The record shows that on September 7, the contracting officer told Centurial that he would not delay bid opening while the agency considered the protest because, if it were sustained, the agency would cancel the IFB and redesign the project. He also indicated that bidders would be told that the procurement would not proceed until the Soil Conservation Service had decided Centurial's protest. Given this strong indication from the agency that bid opening would not be an indication that the procurement was proceeding in a way inimical to Centurial's interest,

we think Centurial did not have to view bid opening as adverse action on its protest. Therefore, we will consider the matter, since Centurial filed its protest with our Office within 10 days of the actual formal denial.

Turning to the merits of the protest, we note that when a specification is challenged as unduly restrictive of competition, the procuring agency must establish prima facie support for its contention that the restrictions it has imposed are reasonably related to its needs. Once the agency establishes this support, the burden then shifts back to the protester to show that the requirements complained of are clearly unreasonable. Amray, Inc., B-208308, Jan. 17, 1983, 83-1 CPD ¶ 43. Thus, our inquiry is whether Centurial has met its burden of establishing that the agency's cost-effectiveness determination—and resulting decision to specify corrugated metal pipe—was clearly unreasonable.

The dispute over cost comparison methodologies in this protest arises from the fact that, while corrugated metal pipe is generally less expensive to install than concrete pipe, its service life is substantially less than that of concrete pipe. Because of soil acidity and resistivity and other environmental factors present in the Pond Run project, the Soil Conservation Service estimates that corrugated metal pipe will have a service life of 50 years, compared with 100 years for concrete pipe. Thus, in determining which type of pipe was the most cost effective, the agency not only considered the initial purchase price and operation and maintenance expenses, but the additional cost of replacing corrugated metal pipe in 50 years.

The protester and the Soil Conservation Service agree that a proper comparison requires that these costs be expressed in terms of their "present value." A present value analysis, which is based on the fact that it is generally beneficial to defer spending, expresses projected future expenditures in terms of current dollars. Its use provides agencies such as the Soil Conservation Service with a common basis for comparing projects that will require spending at different times in the future.

In this case, the agency argues that the method it used to determine present value is required by the guidelines implementing the Water Resources Planning Act

of 1965, as amended, 42 U.S.C.A. § 1962a-2 (West Supp. 1984-85). $\frac{1}{}$ / This Act requires the Water Resources Council to establish principles, standards, and procedures for the formulation and evaluation of federal water resources projects. The guidelines are expressly applicable to Soil Conservation Service projects.

A major aspect of evaluating water resources projects is determining the present value of (1) deferred installation costs, and (2) operation and maintenance costs. For this purpose, the Water Resources Council has established a discount rate to be used in present value calculations that is based on the interest rate of certain United States securities, as determined annually by the Secretary of the Treasury. See 18 C.F.R. § 704.39 (1984). The Water Resources Development Act of 1974, 42 U.S.C. § 1962d-17 (1982), made this discount rate mandatory in the formulation and evaluation of federal water resources projects.2/

To determine the present value of the cost of replacing corrugated metal pipe in 50 years, the Soil Conservation Service discounted the cost of replacing the pipe (estimated to be the cost at the time of analysis, \$242,175) using the applicable discount rate (7-5/8 percent) established by the Water Resources Council. It also discounted future operation and maintenance costs of both types of pipe. The agency concluded that the cost of concrete pipe (installation plus operation and maintenance over 100 years), expressed in present value terms, was \$293,423, while the cost of corrugated metal pipe (installation, operation and maintenance, and replacement after the first 50 years) was \$267,426.

<sup>1/</sup> U.S. Water Resources Council, "Economic and Environmental Guidelines for Water and Related Land Resources Implementation Studies" (March 10, 1983) [guidelines].

<sup>2/</sup> Although the protester and the Soil Conservation Service consider the guidelines and the specified discount rate binding, the guidelines by their own terms do not apply to procurement decisions such as the one at issue here. Nevertheless, we believe it is reasonable for an agency to adopt the same method for comparing the cost of materials to be used in a water resources project that it used to obtain authorization for the project in the first place.

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In its initial protest to our Office, Centurial contended that the agency had improperly used a "sinking fund analysis" to arrive at the present value for replacement of the corrugated metal pipe. This refers to a present value analysis that assumes that portions of the replacement cost will be paid in advance (placed in a sinking fund at specified intervals), rather than paid at the time of replacement. It is not clear from the record that the agency assumed the use of a sinking fund in its calculations, and Centurial has not suggested how such an assumption would change a present value analysis of replacement costs. In any event, in its report on the protest, the Soil Conservation Service provided a present value analysis justifying the exclusion of concrete pipe that was based on a single payment for replacement in 50 years. It therefore is unnecessary for us to consider Centurial's protest on this basis.

Centurial next argues that the Water Resources Council guidelines require the agency to determine the average annual equivalent cost for future expenditures. We agree. The guidelines provide that, after an agency determines the total present value of the cost of a project, it should convert that value to an annual equivalent cost over the period of analysis.3/ The Soil Conservation Service calculates an annual equivalent cost of \$22,388 for concrete pipe and a similar cost of \$20,405 for corrugated metal pipe. Centural argues that the annual equivalent cost of corrugated metal pipe is actually \$29,373, almost \$7,000 higher than that of concrete pipe. The difference between the figures arrived at by Centurial and by the agency results primarily from the fact that, in its calculations for metal pipe, Centurial did not first determine the present value of the replacement cost of the pipe. Rather, the protester converted the replacement cost of \$242,175 to an annual equivalent cost by treating replacement cost as if it were already expressed in current dollars. The quidelines clearly require that agencies determine the present value of future expenditures before converting them to an annual equivalent cost, 4/ and we believe that the Soil Conservation Service properly did so in this case and that Centurial's calculations are incorrect.

 $<sup>\</sup>frac{3}{}$  Guidelines, §§ 2.1.3 and 2.12.4(b).

 $<sup>\</sup>frac{4}{10}$ . §§ 2.1.3 and 2.12.4(b).

Centurial's remaining objection to the Soil Conservation Service's present value analysis is that the agency allegedly neglected to take inflation into account in determining the replacement cost for corrugated metal pipe. Centurial would estimate the replacement cost by increasing the current cost of installation by 5 percent annually. The protester would then determine the present value of this inflated figure. Using this method, Centurial calculates the replacement cost for corrugated metal pipe as \$2,777,118 (\$242,175 inflated at the rate of 5 percent a year). The protester argues that this method is required by the guidelines and that, if it is not required, the guidelines are unreasonable.

The guidelines direct agencies to:

"Base all [National Economic Development] costs on current costs adjusted by the project discount rate to the beginning of the period of analysis. . . . Compute all costs at a constant price level and at the same price level as used for the computation of benefits. Base current costs on the price level at the time of the analysis." 5/

The protester argues that, in this context, "current costs" means costs adjusted for inflation, so that the guidelines require an adjustment for inflation before discounting. However, this interpretation ignores the last two sentences quoted above, which clearly define "current costs" in terms of the price level at the time of analysis and require the use of a constant price level for computing costs and benefits. This approach is consistent with the Office of Management and Budget's instructions to executive agencies to use constant dollars in determining the present value of future costs for projects not subject to the guidelines. OMB Circular No. A-94 (March 27, 1972); see also City of Nenana, B-214269, June 21, 1985, 85-1 CPD 1 708 (interpretation of UMB Circular No. A-104 (June 14, 1972), governing comparative cost analyses for decision to lease or purchase general purpose real property).

 $<sup>\</sup>frac{5}{1}$  Ia. § 2.12.4.

The Soil Conservation Service, as stated above, estimated the replacement cost for corrugated metal pipe to be what it would pay for installation today, then discounted this amount without an increase for inflation during the next 50 years. The agency states that this method accounts for inflation by assuming that the resources of the purchaser, in this case the sponsor of the Pond Run project, will increase at about the same rate as inflation. We note that there are also assumptions about inflation in the particular discount rate selected for use in evaluation of water resources projects. Economists may differ regarding the proper discount rate and other aspects of present value analysis, 6/ but in this case Centurial has the burden of establishing, not that a different method of comparing the cost of the two types of pipe might be reasonable, but that the method used by the Soil Conservation Service was unreasonable and thus unduly restricted competition. In our opinion, Centurial has not done so, and we deny the protest on this basis.

In its comments on the agency report, Centurial raises a number of new issues, several of which had been included in its initial protest to the agency. The protester contends that the agency failed to take into account the effects of eliminating concrete pipe on the local economy, omitted costs associated with replacing corrugated metal pipe after 50 years, overestimated the size and cost of concrete pipe required for the project, and should have solicited offers to supply concrete pipe irrespective of estimated costs in order to obtain actual bid prices for comparison.

When a protester initially files a timely protest and later supplements it, the new grounds of protest must independently meet our timeliness requirements. GEO-CON, Inc., B-214503, July 3, 1984, 84-2 CPD ¶ 13. Here, Centurial was aware of the additional grounds for protest at least by the time it reviewed the Soil Conservation Service's September 12 letter denying its protest to the agency. The additional grounds were not presented to our

Our Office has suggested to the Office of Management and Budget that an approach different from that established by the guidelines might generally be more useful. See "Improved Analysis Needed to Evaluate DOD's Proposed Long-Term Leases of Capital Equipment" at 23, 35-37 (PLRD-83-84, June 28, 1983).

Office until more than 5 months later, rather than within the 10 days required by 4 C.F.R. § 21.2. These grounds of protest, therefore, are untimely.

We deny the protest in part and dismiss it in part.

Harry R. Van Cleve General Counsel