COCEF / BECC

Compliance with Fundamental Criteria and Reasons for Project Certification

Date: January 18, 1996

Project Name	Water Supply and Distribution, Treatme Phase I.	nt and Recharge.
Location of project site	Nogales, Sonora, Mexico	
Type of Project:	a) Water supply	x
	b) Wastewater treatment	
	c) Solid waste management d) Other related projects	

FUNDAMENTAL CRITERIA COM-

DISCUSSION

1. General I	Project Desc	cription
Border Region. The project must be located within 100 km (62 miles) of the located with the located		roject is located in the border city of Nogales,
Project work tasks. Project work tasks and budget estimates by task must be reasonable, in order to complete project as planned by the Applicant.	Yes.	The project proposal includes completion of each of its phases based on the budget program and tasks assigned. The first phase includes development of studies and projects that will serve as a basis for planning, design, and construction of the second phase.

2. Environment and Human Health		
Enhancement of Environment and Human Health. All projects must address a critical human health and/or environmental need.	Yes.	The project addresses improvement of the potable water supply system with an improved source and distribution system which does not increase the amount of water taken out of the aquifer.
Environmental Protection. Projects	Yes.	Sources will be protected since no water will be

should achieve a high level of environmental protection for the affected area that results in a benefit to the environment or human health. Projects with negative impacts must provide actions to mitigate the impacts.		withdrawn, but an efficient pumping system will be established by regulating water distribution through adequately located storage tanks and a main water line that will encircle the city. The Santa Cruz Aquifer, one of the sources, is binational.	
Compliance with Applicable Environmental Regulations. All projects certified by the BECC must demonstrate compliance with all applicable local, regional, state, and federal environmental regulations before project operations begin. The BECC may condition its certification upon the Applicant's ability to comply with applicable environmental regulations.	Yes.	The Environmental Impact Statement has been duly authorized. The corresponding decree includes the conditions that need to be met before it is authorized. The project has the permit to relocate the water wells by the National Water Commission (CNA).	
Environmental Assessment. Every Applicant must submit an environmental assessment before the project may be considered for certification. On a case-by-case basis, the BECC may certify a project before the assessment is "final" according to applicable domestic environmental laws. In such instances, the BECC may condition the certification upon successful completion of the assessment.	Yes.	The Environmental Impact Statement has been submitted to BECC.	
Conformance with Applicable Local and Regional Plans. All projects must address applicable local and regional plans as well as land use and zoning regulations.	Yes.	Project conforms to the City of Nogales Planning programs as well as with the Municipal Development Plan.	
Conformance with Applicable International Agreements. Projects must comply with applicable international agreements.	Yes.	Project does not interfere with any international treaty between Mexico and the United States since it's based on improving the water distribution system without increasing the current extraction.	

3.	Technical	Feasibility
Appropriate Technology. BECC will only certify projects which use appropriate technology and which are designed to be constructed, operated, and maintained in a cost-effective manner to achieve the project's purpose.	Yes.	Construction of a water distribution macrocircuit (encircling main line), regulation and distribution tanks, as well as improvements to the water extraction system by utilizing water wells that have higher capacity and are better located, as well as the use of conventional technology. Likewise, the pumping equipment will be updated and more efficient, using 20% less power resulting in a cost efficient operation and maintenance program.

4. Economic and Financial Feasibility			
Debt Coverage. Project revenues must be sufficient to cover debt amortization and operation and maintenance costs with an appropriate safety margin.	Yes.	The project has an adequate debt coverage, by increasing the revenues of the Water Utility from the sale of water rights, differential increases in the rates and the improvement of the efficiency of collection. Updating the user data base, presently underway, will allow an increase in the collection of fees.	

	5: Social	Issues
Compliance with Applicable Cultural Resources Regulations. All projects certified by the BECC must comply with all appropriate cultural resource (i.e. historical, archeological, and ethnic) regulations.	Yes.	This project does not affect any cultural resources and the project will mainly be executed in an urban area where the water lines to be improved are already in existance.

6. C	Community 1	Participation
Comprehensive Community Participation Plan. Applicants must submit and implement a BECC-approved Community Participation Plan that will consist of meeting with local organizations conducting at least one publicly advertised public meeting, and may utilize a local steering committee.	Yes	The Community Participation Program has been developed by the sponsor and BECC. The submittal of the final document is still pending. However, a great number of public meetings have taken place with different sectors of the community, therefore it is considered the criteria requirements have been met.
Public Acceptance. The Comprehensive Community Participation Plan report submitted to the BECC following implementation shall indicate the degree of public acceptance of the project.		The project has been accepted by a large portion of the community; however, the political opposition has rejected it unless the user fee increase is publically made known, as well as an explanation is provided in reference to the financial standing of the Alisos Aquifer project. The project sponsor has refused to explain the financial status of the project before the Advisory Council of the Water Utility, which is the only authority that can establish the user fee increases, decides to do so.

7. Oper	ation and Maintanance
Operation and Maintenance Program. Project documents must include an operation and maintenance program, including an effective program for emergency planning, an occupational health and safety plan, training plan for operation and maintenance personnel, and where applicable, a pollution prevention plan, facility closure plan, and post-closure plan.	The works that will be implemented during this first phase are totally similar to existing infrastructure already operated and maintained by the water utility, and for which it plenty of experience, thereby it is considered that the operation and maintenance capacity aspects are sufficiently covered. Also, the CNA is able to help in institutional capacity building of the utility.

8. Su	stainable	Development
Principles. Projects must adhere to the principles of sustainable development set forth above.	Yes	The project adheres to the principles of sustainable development indicated in the BECC criteria.
Institutional and Human Capacity Building. Projects must demonstrate and strengthen the ability of the community for long-term support and maintenance, including measures to build human and institutional capacities.	Yes	An ample public awareness program is available, that will allow the long-term continuation of the project. There is also the similar water-works of the Alisos Aqueduct, which the public has ample experience in following and keeping up to date.

Leading Sustainable Development include the following Sustainable Development

ment Characteristics	Application	
adopt a comprehensive approach to natural l protection by implementing ecosystem	Yes	
combine source reduction and recycling into inimizes residuals.	Yes	
re designed to lower their life cycle cost by	Yes, Substitution of older equipment	
t increase the efficiency of energy production	Yes: More efficiens	

rincrease the efficiency of energy production pumps

ciently, in an area where there is scarcity and it is difficult to manage. It santa Cruz will be extended, by not increasing the extraction rate tained by substituting 20 low efficiency pumps with three new ones. gales, Sonora, population.

stewater treatment plant will be decreased, by rehabilitating the sewer cormwater and potable water, which receive unnecessary treatment. ity's water sources will be protected from the pollution generated by reas of the network.

TAFF OPINION:

le by the City of Nogales, Sonora, to develop this project, en with the City of Nogales Arizona to develop in onal authorities:

Sand Stand Carz aguifer in relation to the libe required in the second phase of this project.

Inted infrastructure in the Santa Cruz aquifer until

ation for the future withdrawal of water from the

Nogales, Sonora to the treatment plant located in

selection of the best option for both cities, on the ter treatment plant for the city of Nogales, Sonora

the BECC Fundamental Criteria, this project is eration of certification

Cd. Juárez, Chihuahua, January 18, 1996

Sustamable Develop
Ecosystem Management. Projects that
resource management and environmenta
management.
Project Life Cycle Planning. Projects that
an overall product life cycle approach that m
Project Life Cycle Cost. Projects that as
reducing inputs of margy southment, maint
Energy Production Efficiency, Projects that
(i.e. more emicient turolities).
Berter Environmental or Health Servi environmenta or health services (i.e. clean d
Post-Certification Participation Plan.
Confinerseem bray and are Sara a recommend by

Other:

- The water resource will be used more effi
- The useful lifetime of the binational aquife
- Important savings in power use will be ob
- Water will be supplied to 100% of the No.
- The operation costs of the binational was system and avoiding the introduction of s
- By rehabilitating the sewer system, the c wastewater spills in the highly damaged a

The BECC recognizes the effort made to the coordination with the corresponding bination

infrastructure works that will Not develop more withdrawal wells and rethe corresponding studies have been finished.

Review and establish the basis of coording Santa Cruz aquifer.

 Not increase the flow of wastewater from Nogales, Arizona.

 Conclude the analytical procedure for the location and operation of the new wastewa

Based upon the project evaluation related to presented to the Board of Directors for considerations and the control of the project evaluation related to the project evaluation