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**CATEGORICAL EXCLUSION DETERMINATION
MONITORING WELLS IMPROVEMENTS
NEPA DOC. NO. 33**

10/17/87

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FMPC		COGNIZANT PROJECT ENGINEER L. Copeland	
NEPA DOCUMENTATION		PROJECT LOCATION Plant-wide	
PROJECT/PROGRAM TITLE GPP-GE (FA-166) MONITORING WELLS IMPROVEMENTS		PROJECT COST \$48,000	
PROJECT/PROGRAM NUMBER 18-87103	NEPA DOCUMENT NUMBER 000033	CONSTRUCTION START DATE November, 1987	
		NEPA SUBMITTAL DATE SEP 09 1987	
<p>PROJECT EXECUTIVE SUMMARY</p> <p>This project consists of several minor modifications and restorative actions such as installing new seals, discharge tubing, locking covers, electrical connections, and submersible pumps. Any oil that has leaked into the wells from the old oil-lubricated pumps will be removed and drummed. The wells will be pre-approved by a certified geologist and a licensed well driller. Wells' identifications and locations are indicated per the attached drawing.</p>			
<p>PROJECT JUSTIFICATION</p> <p>This project does not introduce hazards that are not routinely encountered and/or accepted by the general public. The environmental aspects of this this project will be monitored by the Environmental Compliance subsection who, along with Waste Management, should determine proper disposition of any oil removed from the wells. Cumulative impacts of this project have been assessed, and it has been determined that this action does not have net adverse environmental impacts. Other options have not been precluded by this action.</p>			
EXISTING NEPA DOCUMENTATION/DATE SUBMITTED			
NONE XX	N.C.	ADM.	E.A.
THIS NEPA DOCUMENT			
N.C. SEP 09 1987	ADM.	E.A.	E.I.S.
DOE APPROVAL REQUESTED	COGNIZANT PROJECT ENGINEER/DATE <i>L. Copeland 8/31/87</i>		
DOE/FMPC <u>XX</u>	SITE NEPA COORDINATOR/DATE <i>Julius C. Van Gaten 9-10-87</i>		
DOE/ORO _____	SITE NEPA MANAGER/DATE <i>[Signature] 9-11-87</i>		
DOE/HQ _____	SITE DOE OFFICER/DATE <i>James A. Reardon 10/17/87</i>		
ADDITIONAL DOE APPROVAL(S) NEEDED) DATE			

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1.0 PURPOSE AND NEED

The project is developed to replace selected worn and deteriorated monitoring well parts and pumps. Some wells and pumps have been degraded as a result of exposure to seasonal weather conditions and age of equipment. Monitoring wells need to be repaired in order to maintain an accurate and efficient water monitoring network at the FMPC.

2.0 PROPOSED ACTION

There are fifteen (15) wells associated with the project (see attached drawing). Modifications consist of the following:

- o Installation of locking covers;
 - o Installation of modified electrical connections to accommodate new well seals and locking covers;
 - o Clear surface area to grade and install gravel bed around well head;
- NOTE: Soil is not likely to be contaminated; however, if contaminated soil is encountered, it will be drummed for removal and off-site shipment.
- o Removal of existing submersible pumps and well seals;
 - o Installation of new submersible pumps and well seals;
 - o Check and repair as necessary, each concrete surface seal at ground surface for each well.

Project construction duration is approximately 6 to 8 weeks and will be conducted in conformance with DOE, OSHA, and FMPC regulations governing Health and Safety. Required permits will be obtained.

3.0 ALTERNATIVES CONSIDERED

3.1 No Action

If no action is taken, failure to repair and/or modify wells could result in equipment mechanical and structural failure; subsequent noncompliance with E.P.A. limits and requirements.

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3.2 Build New Utility

An alternative to the previously proposed action would be to replace all associated well pumps and reconstruct wells. This alternative would be unnecessarily time consuming. New well construction would also result in a greater potential contamination of groundwater during installation.

3.3 Proposed Action

The previously proposed action (2.0) is preferred because the replacement of all well pump parts, a few pumps, and well repairs are more feasible. This approach is also least likely to result in seepage to the groundwater in the area.

4.0 POTENTIAL ENVIRONMENTAL IMPACTS

4.1 Construction

Normal maintenance and construction hazards may be encountered during well repairs and modifications. It is anticipated that approximately 5 drums of oil will be encountered during the course of this project. Oil will be handled in accordance with all applicable regulations and FMPC practices. Little construction rubble is expected consequent to this action; however, discarded well equipment will be monitored for contamination and treated in accordance with DOE and FMPC guidelines. An estimated 200 pounds of such scrap is expected to be generated by this action. If contaminated soil is encountered, it will be drummed for offsite shipment and clean fill will be used wherever necessary. It is anticipated that no more than two (2) drums of soil will need to be removed.

Approximately six additional workers will be employed on this project. Additional heavy equipment possibly required for this project include one concrete truck and grading equipment for 1 to 2 days.

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A limited amount of waste well water will need to be pumped during testing of the reconditioned wells. This water will be routed to the biodenitrification surge lagoon after testing, and subsequently be treated for discharge to the Great Miami River. It is estimated that the total discharge will be less than 5000 gallons.

4.2 Operation

These wells are for data documentation only and have no immediate environmental impact.

4.3 Permit Compliance

Water pumped from monitoring wells will be tested and checked to assure that water-borne contaminants will not have disruptive adverse environmental effects on the total FMPC discharge to the Great Miami River. Amount of discharge will be less than 5,000 gallons total.

All necessary permits will be submitted prior to work performed, per WMC0 procedures, certified geologist, and licensed well driller.

5.0 CONCLUSION

Monitoring wells modifications will:

- o Satisfy applicable E.P.A. requirements.
- o Extend equipment operation span.
- o Provide a more efficient monitoring network.

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- o Decrease the potential of oil dispersion in water.
- o Repair and replace defective well parts.

The monitoring wells improvements project has no overwhelming environmental impact, it is simply a maintenance project developed to ensure proper equipment operation and accuracy.

The monitoring well improvements described here represent actions which may be taken during the course of an ongoing EIS, as defined by the Council on Environmental Quality (40 CFR 1506.1). As such:

1. This action has no net adverse environmental impact. These well improvements will allow adequate maintenance of the wells currently used for monitoring purposes. Only a very minor amount of construction rubble and a small amount of oil-contaminated water is expected to result during the course of this project.
2. This action does not preclude the choice of reasonable alternatives. Should future monitoring needs suggest that these wells are no longer needed, the wells can be closed in such a manner as to protect the groundwater they currently monitor.

6.0 CUMULATIVE IMPACTS

No net negative environmental impacts have been assessed to result from this project, and other reasonable alternatives are not precluded by this action.

2.0 Will program activities involve discharges to any one of the following systems during the construction of the proposed project?

Low level waste disposal (describe)	Y	N X	U
Process waste stream	Y	N X	U
Sanitary waste stream	Y	N X	U
Storm sewer	Y	N X	U

3.0 Will any of the following be encountered, handled, stored, used, or disposed of during operation of, or following the proposed program changes?

Radioactive materials (identify)	Y	N X	U
Hazardous materials (identify)	Y	N X	U
Toxic materials (identify)	Y	N X	U
Mixed hazardous and radioactive materials (identify)	Y	N X	U
PCB's (identify source)	Y	N X	U

Asbestos (identify source)	Y	N X	U
Organic chemicals (identify)	Y	N X	U
Heavy metals (identify)	Y	N X	U

4.0 Will program activities involve discharges to any one of the following systems during operation of, or following the proposed program changes?

Low level waste disposal (describe)	Y	N X	U
Process waste stream Discharge purge water to Bio-lagoon.	Y X	N	U
Sanitary waste stream	Y	N X	U
Storm sewer	Y	N X	U

5.0 Are uncontrolled emissions, discharges, or spills possible during:

The construction phase of this project?	Y X	N	U
The operational phase, upon completion of the project?	Y	N X	U

6.0	Will the project involve any of the following:			
	Need for aboveground storage during construction?	Y X	N	U
	Need for underground storage during construction?	Y	N X	U
	Need for aboveground storage during operations?	Y	N X	U
	Need for underground storage during operations?	Y	N X	U
7.0	Is the project located in close proximity to a natural stream or within the floodplain of a natural stream?	Y	N X	U
8.0	Are controlled emissions or discharges planned during:			
	The construction phase of this project?	Y	N X	U
	The operational phase, upon completion of this project?	Y	N X	U

