STATE OF ALASKA
ALASKA OIL AND GAS CONSERVATION COMMISSION
333 West Seventh Avenue, Suite 100
Anchorage Alaska 99501-3539

Re: Improper Class II Injection in Redoubt Unit Well D1; Forest Oil Corporation	)))	AOGCC Order No. 46 February 16, 2007

DECISION AND ORDER

The Alaska Oil and Gas Conservation Commission ("Commission") issued a Notice of Proposed Enforcement Action ("Notice") under 20 AAC 25.535(b) on January 12, 2006 stating that it considered that Forest Oil Corporation ("Forest") may have engaged in improper waste injection at Redoubt Unit Well D1. The Commission proposed specific corrective actions and a $39,000 civil penalty under AS 31.05.150(a).

A Proposed Decision and Order was sent to Forest on January 29, 2007 following informal review and extensive consideration of factors that might impact the enforcement decision. The Proposed Decision and Order was substantially the same as in the notice of proposed enforcement, except for the elimination of the civil penalty. Forest did not file a written request for hearing within the time allowed by 20 AAC 25.535(d) and, therefore, the Commission now issues this Decision and Order.

A. Summary of Proposed Enforcement Action

In its Notice, the Commission identified an apparent violation by Forest, specifically Rule 2 of Disposal Injection Order 22. The violation consisted of Forest's failure to comply with fluid restrictions imposed on Underground Injection Control ("UIC") Class II waste disposal wells by allowing the injection of domestic wastewater generated at the Osprey Platform for 39 days.[1] The Commission proposed to order the following corrective actions be completed by Forest:

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[1] October 23, 2004 through November 30, 2004.

1. Within 90 days, Forest shall be required to provide the Commission with underground injection guidelines that ensure the operator's compliance with regulatory requirements and implementation of best management practices for disposal and enhanced recovery injection actions taken at all Forest-operated facilities within Alaska;

2. Upon approval of the guidelines by the Commission, Forest shall be required to implement the injection guidelines;

3. Forest shall be required to train all field personnel engaged in injection activities with the new best practices guidelines, and shall provide the Commission with written confirmation that all personnel have received this training;

4. Forest shall be required to provide written progress reviews detailing corrective actions completed, and updating the status and timing for the completion of unfinished corrective actions. The report shall be due on or before the 15th of each month following the effective date of the enforcement order, and until all corrective actions have been completed.

In addition, the Commission proposed payment by Forest of a civil penalty under AS 31.05.150(a) in the amount of $39,000 ($1,000 per day for each day domestic wastewater was improperly injected into Redoubt Unit Well D1).

B. Misinjection of Domestic Wastewater

Rule 2 of Disposal Injection Order 22 provides:

> *This authorization is limited to Class II waste fluids as follows: produced water, drilling, completion and workover fluids, rig wash, drilling mud slurries, NORM scale, tank bottoms, and other fluids brought to the surface in connection with oil and gas development activity on the Osprey platform.*

Three administrative approvals under DIO 22 further define the fluids eligible for injection into RU Well D1.[2] None of the approvals authorized the injection of domestic wastewater (i.e., effluent from sink and shower drains on Redoubt Unit Osprey platform).

C. Violation

In its letter dated January 25, 2006 Forest agreed that domestic wastewater was "inappropriately injected into a Class II disposal injection well (Redoubt Unit Well D1)." An informal review was held at Forest's request on February 23, 2006 to discuss the Notice and to give Forest the opportunity to provide additional information it believes has not been considered in the Commission's findings. Forest also accepted full responsibility for the delay in notifying the Commission of the improper injection. Following informal review, Forest provided the Commission with letters dated March 3, 2006 and June 15, 2006 outlining proactive responses to the proposed corrective actions.

D. Mitigating Circumstances

Forest stated in its January 25, 2006 letter that the civil penalty amount was excessive, "understanding that proposed penalty of $39,000 was based on the maximum daily fine allowable." Forest's understanding is incorrect. The proposed civil penalty was calculated on $1,000 per day instead of the maximum $5,000 per day allowed by AS 31.05.150(a). Mitigating factors applied to the proposed civil penalty amount included (1) Forest's good faith effort to reconfigure domestic wastewater disposal systems to ensure compliance with Commission regulation and orders, and; (2) the lack of injury to the public as demonstrated by the good mechanical integrity of RU Well D1; and, (3) the confinement to the intended injection zone of all fluids injected into RU Well D1, as most recently confirmed by the Commission as part of administrative action DIO 22.004.

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[2] DIO 22.001 authorizes injection of storm water collected on Osprey platform; DIO 22.002 authorizes injection of a mixed stream of treated sanitary effluent and produced water; DIO 22.004 authorizes the commingling of appropriate Class II oilfield wastes from West McArthur River Unit Production Facility, Kustatan Production Facility, and various planned exploration drilling activities on the West side of Cook Inlet for the purpose of disposal injection into RU Well D1.

Additional mitigating circumstances were presented to the Commission during the informal review. Despite the delay, Forest did take the initiative to report the error when it realized unauthorized fluids were being injected into Well D1. Forest states that the error is attributable to confusion about the fluids eligible for injection, in part due to past practice of overboard discharge of a commingled sanitary effluent and domestic wastewater streams authorized under a National Pollutant Discharge Elimination System permit. Injection occurred at a time when Forest was working toward conversion of the Redoubt Unit Osprey platform to a zero surface discharge facility.

Mitigating circumstances presented by Forest during the informal review also included the fact that the fluids have been demonstrated as non-hazardous by comprehensive testing. Additionally, an aquifer exemption has been granted for all freshwater sources beneath the Redoubt Unit below 3,650 feet true vertical depth subsea. That information coupled with the confirmed mechanical integrity of the well and confinement of injected fluids mitigates the concerns about harm to the surface and subsurface environments.

Forest points out that the cost of injecting wastewater exceeds the cost of overboard disposal; at no time did Forest realize a benefit from the injection of domestic wastewater since overboard disposal is authorized for this waste stream under the EPA's National Pollutant Discharge Elimination System permit.

One final mitigating factor of note is the implementation of corrective actions taken by Forest when it was realized that domestic wastewater was being improperly disposed into Redoubt Unit Well D1. The following proactive efforts have been completed by Forest according to their correspondence dated June 15, 2006:

1. Compliance Matrix – comprehensive review of all injection orders and regulations outlining fluids authorized for injection and wells that have specific approvals, reporting, and monitoring requirements;

2. Training – completed training of all employees and contract personnel working for Forest in waste management, including both Resource Conservation and Recover Act and UIC requirements; refresher training will be completed annually;
3. UIC Class I Well – completed the conversion of Redoubt Unit Well D1 to UIC Class I (EPA UIC Permit AK-1I007-A), effective October 12, 2006; this conversion eliminates confusion about the segregation of fluids eligible for Class II injection;
4. Zero Surface Discharge Facility – as of July 15, 2005, completed implementation of zero surface discharge for all effluent streams on Redoubt Unit Osprey platform except the recycled Cook Inlet water used for testing the fire water pumps.

E. Findings and Conclusions

For the reasons stated above, the Commission finds that Forest violated rules governing the proper fluids for disposal injection, namely that domestic wastewater was improperly injected into UIC Class II disposal well D1 within the Redoubt Unit. Mitigating circumstances outlined above are relevant and should be considered in the Commission's final decision about the need for proposed enforcement actions. After careful consideration of all the relevant facts and the arguments presented by Forest at the February 23, 2006 informal review conference and in its associated written submissions, the Commission finds that it is appropriate to exercise the Commission's discretion not to assess a civil penalty in this case.

NOW THEREFORE IT IS ORDERED THAT:

Forest shall comply with the following corrective actions:

1. Within 90 days from the effective date of this order, Forest shall provide the Commission with underground injection guidelines that ensure the operator's compliance with regulatory requirements and implementation of best management practices for disposal and enhanced recovery injection actions taken at all Forest-operated facilities within Alaska;

2. Upon approval of the guidelines by the Commission, Forest shall implement the injection guidelines;

3. Forest shall provide the Commission with written confirmation that all personnel involved in injection operations and decisions have received the training consistent with the new best practices guidelines.

Done at Anchorage, Alaska this 16th day of February, 2007.

John K. Norman, Chairman
Alaska Oil and Gas Conservation Commission

Cathy P. Foerster, Commissioner
Alaska Oil and Gas Conservation Commission