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PRELIMINARY ENVIRONMENTAL REVIEW

KRUTAR TROUT FARM

OVANDO, MONTANA

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WATER QUALITY BUREAU
ENVIRONMENTAL SCIENCES DIVISION
DEPARTMENT OF HEALTH & ENVIRONMENTAL SCIENCES

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I. DESCRIPTION OF PROPOSED ACTION

Section 69-4806 states in part: "It is unlawful to:

- (2) carry on any of the following activities without a current permit from the Department:
 - (a) construct, modify, or operate a disposal system which discharges to any state waters;
 - (b) construct or use any outlet for discharge of sewage, industrial waste, or other waste to state waters; or
 - (c) discharge sewage, industrial waste, or other waste into any state waters; or . . ."

On January 18, 1974, the Board of Health and Environmental Sciences adopted a rule, MAC 16-2.14(10)-S14460, entitled the Montana Pollutant Discharge Elimination System (MPDES). This rule provided program elements needed by the State to administer a waste discharge permit program in the State of Montana. Section 4 of MAC 16-2.14(10)-S14460 states in part:

- (c) "The owner or operator of any proposed point source, which may discharge pollutants into state waters, shall file a completed MPDES permit application no less than 180 days prior to the day on which it is desired to commence operation of the point source . . ."

Krutar Trout Farm, on April 27, 1976, applied to the Department of Health and Environmental Sciences for an MPDES permit to discharge its trout farm water to Rock Creek. The application indicates an expected discharge in the range of 32,000 to 44,000 M³/day (8.40 to 11.63 MGD). The water used will be non-consumptive and returned to Rock Creek, except for a minute loss by evaporation.

Treatment of water used in this trout farm is by a settling pond which accepts all flow from the ten raceways. Treatment in this pond is accomplished by simple settling of suspended sediments and biological decomposition.

Periodically (about once per year) each raceway will be cleaned. Water used during the cleaning procedure will enter the settling pond with normal flow-through water from the other nine (9) raceways. The final step of raceway cleaning will involve sanitizing the washed raceway with a chlorine solution. This chlorine solution will be held in the raceway until the concentration is low enough so that the dilution received in the settling pond is adequate to meet the discharge limitation of the permit. If necessary, holding time of chlorinated raceway water could be held in the cleaned raceway several days to allow dissipation of chlorine before discharging to the settling pond.

Wastewater discharged to Rock Creek from the settling pond will be of comparable quality to the water entering this facility. No significant change is expected in temperature, total suspended solids, pH, chlorine, and other parameters resulting from this facility. No significant impact is expected in Rock Creek from the discharge water.

II. DESCRIPTION OF THE PROJECT

The proposed project is situated about five miles east of Ovando, Montana, just north of Montana Highway 200 on a 500 acre ranch owned by Krutar. The point of the stream diversion and raceway site are in Section five, Township 14N, Range 11W, Powell County.

The applicant intends to commercially raise rainbow trout for sale to processing plants. Krutar received a Renewable Resource Development loan of \$48,000 from the State Department of Natural Resources and Conservation last year for the construction of 10 raceways, approximately 3'x25'x130', and accompanying access roads and facilities. The trout being raised in the raceways will require a continuous flow of water. The water will be diverted from Rock Creek near the trout farm and returned to the creek less than a quarter mile from the point of diversion (see attached map #1).

III. PHYSICAL ENVIRONMENT IMPACT SUMMARY

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	Major	Moderate	Minor	None	Unknown	Comments on Attached Pages
1. Terrestrial and aquatic life and habitats			X			3
2. Water quality, quantity and distribution		X				3
3. Geology and soil quality, stability and moisture				X		N/A
4. Vegetation cover, quantity and quality			X			3
5. Aesthetics			X			3
6. Air quality				X		N/A
7. Unique, endangered, fragile, or limited environmental resources				X		N/A
8. Demands on environmental resources of land, water, air and energy		X				4
9. Historical and archaeological sites				X		N/A

Terrestrial and Aquatic Life and Habitats:

Aquatic habitats may be altered in Rock Creek, at and a short distance below the discharge point. This would result from the addition of nutrients from the discharge. The nutrients may cause a slight increase in populations of native periphyton and aquatic insects. This minor impact on the aquatic habitat would not adversely effect the creek's aquatic life.

Aquatic life in Rock Creek between the intake diversion and the discharge may be significantly affected by dewatering of this section of stream. However, this section is only marginal for aquatic life as diversions for irrigation purposes have caused the same type of impact in the past.

The only significant impact on terrestrial life and habitats will result through the loss of a relatively small area of land where this facility is located. The type of land lost to this facility is grazing land.

Water Quality, Quantity, and Distribution:

Minute increases may result in total suspended solids, nutrients and BOD. However, these increases will not significantly effect water quality.

Dewatering of Rock Creek will result between the diversion intake and the discharge point. All water diverted from the creek will be returned. Therefore, water quantity impacts, caused by dewatering, will occur only in this short stretch of stream. Flows above the diversion and below the discharge will be unaffected by this facility.

Vegetation Cover, Quantity and Quality:

With the exception of several small stands of timber, most of the trout farm site is used for pasture. Since the raceways will have graveled bottoms and grass covered slopes, vegetation in the area will not change appreciably. The settling and holding ponds and raceways will reduce the amount of grazing land; however, the reduction will be slight in comparison to the amount of pasture available in the area.

Aesthetics:

Construction of the trout farm will permanently alter the pastoral landscape, but the aesthetic change will not be noticed by the general public. The proposed development is about a fourth of a mile north of Highway 200 and is shielded from the highway by a tree lined creek bank.

Demands on Environmental Resources of Land, Water, Air and Energy:

There is no recorded annual stream flow for Rock Creek, according to information from the Department of Natural Resources and Conservation. Additionally, the U.S. Geological Survey indicates the creek becomes an intermittent stream below the irrigation reservoir. During periods of low flows it's possible the portion of the stream between the diversion and where the water reenters the stream, will be dewatered.

A field inspection revealed there are no large or critical water uses along the portion of stream which could be dewatered. Also, it didn't appear the stretch of stream was a popular spot for fishing, picnicing, etc.

IV. HUMAN ENVIRONMENT IMPACT SUMMARY

POTENTIAL IMPACTS ON HUMAN ENVIRONMENT

	Major	Moderate	Minor	None	Unknown	Comments on Attached Pages
1. Social structures and mores				X		N/A
2. Cultural uniqueness and diversity				X		N/A
Local and state tax base and tax revenue			X			5
4. Agricultural or industrial production			X			5
5. Human health				X		N/A
6. Quantity and distribution of community and personal income				X		N/A
7. Access to and quality of recreational and wilderness activities				X		N/A
8. Quantity and distribution of employment			X			5
9. Distribution and density of population and housing				X		N/A
10. Demands for government services				X		N/A
11. Industrial and commercial activity				X		N/A
12. Demands for energy				X		N/A
13. Locally adopted environmental plans and goals				X		N/A
14. Transportation networks and traffic flows				X		N/A

Local and State Tax Base and Tax Revenue:

The tax status of the land will change if the trout farm is constructed. However, according to Department of Revenue personnel, the possible change in tax status and amount of taxes cannot be determined until the project is completed.

Agricultural or Industrial Production:

The proposed development will change the form of agricultural production from grazing to raising trout. Even though a more intensive form of agriculture will be instituted, the nature of the operation should not result in negative impacts or influences on neighboring ranch operations.

Quality and Distribution of Employment:

According to the developer's son, Jon Krutar, Helena, the operation will initially require a part-time employee. Future employment will be based on the success of the operation, he said.

V. RECOMMENDATION CONCERNING PREPARATION OF EIS

The Department of Health and Environmental Sciences recommends that the Preliminary Environmental Review adequately assesses the anticipated impacts and complies with the Montana Environmental Policy Act.

The Department also recommends that an Environment Impact Statement need not be written for this proposed wastewater discharge.

VI. ACKNOWLEDGEMENTS FOR PREPARATION OF PER

Groups and Agencies:

Department of Health and Environmental Sciences
Department of Natural Resources and Conservation

References:

Preliminary Environmental Review of Krutar Trout Farm, June, 1976,
by the Department of Natural Resources and Conservation, Water
Development Bureau

Prepared by:

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KRUTAR TROUT FARM MAP #1

Ovando
3 mi.

T 15N
T 14N

Lincoln
21 mi.

