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Office of the Attorney General
DEQ-IDHW

BEFORE THE BOARD OF HEALTH AND WELFARE
STATE OF IDAHO

EARL HARDY,)
)
Petitioner,)
)
vs.)
)
IDAHO DEPARTMENT OF HEALTH)
AND WELFARE,)
)
Respondent.)
)
and)
)
HAGERMAN VALLEY CITIZENS,)
ALERT, INC.; IDAHO)
CONSERVATION LEAGUE, INC.;)
DIANNE E. ELASICK; NED SWISHER;)
RANDALL MORGAN; and, WILLIAM)
K. CHISHOLM)
Petitioner/)
Intervenor.)
)

Docket No. 0102-91-24

O R D E R

The Board, having reviewed the Hearing Officer's Recommended Findings of Fact, Conclusions of Law and Order, filed January 11, 1993, and;

Exceptions having been filed by Daniel Steenson Esq., acting on behalf of the Petitioner, Earl Hardy, and the Respondent, Kevin Beaton, Deputy Attorney General, representing the Division of Environmental Quality, and all parties having been afforded an

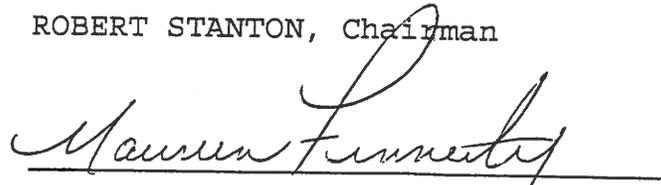
present Oral Argument to the Board on June 18, 1993, pursuant to IDAPA 16.05.03102, the Recommended Findings of Fact, Conclusions of Law and Order shall be adopted in full as the FINAL DECISION AND ORDER of the Board of Health and Welfare. A copy of above-referenced documents are attached and incorporated herein.

Judicial Review of this Final Order may be had pursuant to Section 67-5215, Idaho Code.

DATED this 18th day of June, 1993.

FOUR MEMBERS AFFIRMED THE DECISION:

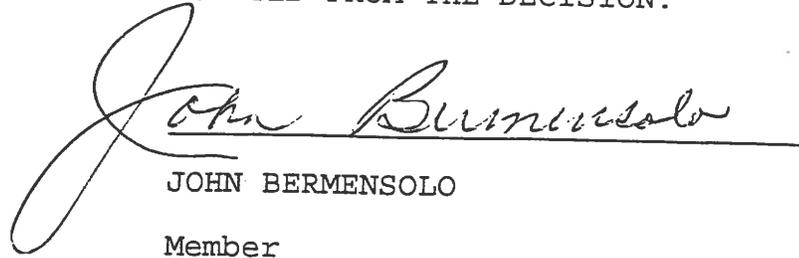

ROBERT STANTON, Chairman

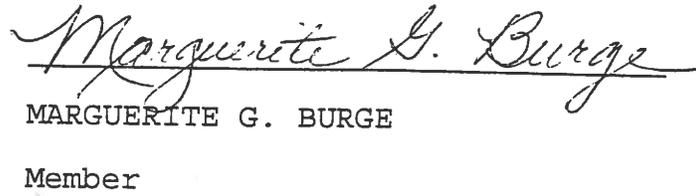

MAUREEN FINNERTY, Vice Chair

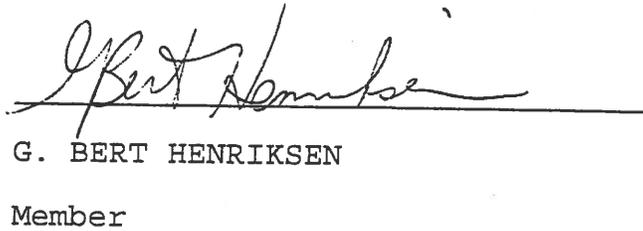

WYLLA BARSNESS, Secretary


DONNA L. PARSONS
Member

THE FOLLOWING BOARD MEMBERS DISSENTED FROM THE DECISION:


JOHN BERMENSOLO
Member


MARGUERITE G. BURGE
Member


G. BERT HENRIKSEN
Member

CERTIFICATE OF MAILING

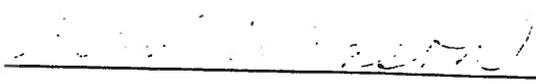
I hereby certify that on this 21st day of June, 1993, I mailed a true and correct copy of the foregoing ORDER to the following named individuals by First Class Mail:

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Idaho Dept. of Health & Welfare
Administrative Procedure Section
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DOCKET NO. _____

BEFORE THE IDAHO STATE BOARD OF HEALTH AND WELFARE
STATE OF IDAHO

EARL HARDY,

Appellant,

vs.

IDAHO DEPARTMENT OF HEALTH
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HAGERMAN VALLEY CITIZENS
ALERT, INC.; IDAHO
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DIANNE E. ELASICK;
NED SWISHER; RANDALL MORGAN;
and, WILLIAM K. CHISHOLM,

Petitioners/
Intervenors.

DOCKET NO. 0102-91-24

RECOMMENDED FINDINGS OF FACT,
CONCLUSIONS OF LAW AND ORDER

This matter is before the Board of Health and Welfare, State of Idaho, ("Board") as a contested case proceeding under and pursuant to I.C. §39-107(6). This statute provides that any person aggrieved by an action of the Department of Health and Welfare shall be afforded an opportunity for a fair hearing before the Board under the contested case provisions of the Idaho Administrative Procedures Act. This proceeding involves action by the Department of Health and Welfare, Division of Environmental Quality ("DEQ") of April 19, 1991 denying §401 Certification of an

application submitted by Mr. Earl Hardy for an NPDES Permit. The hearing in this matter occurred over a period of several months and included oral testimony offered by all of the parties, documentary evidence, video tape evidence, and briefs of counsel. Numerous photographs of the Middle Snake River and the proposed trout farm were also admitted into evidence. The parties to this contested case proceeding are Appellant, Mr. Earl Hardy ("Mr. Hardy") represented by William F. Ringert and Daniel V. Steenson of the firm Ringert Clark, Chartered; Intervenors, Hagerman Valley Citizens Alert, Inc., Idaho Conservation League, Inc., Dianne E. Elasick, Ned Swisher, Randall Morgan, and William K. Chisholm ("Intervenor"), represented by Jeffrey C. Fereday of the firm Givens, Pursley, Webb & Huntley; and the Department of Health and Welfare, Division of Environmental Quality represented by Kevin J. Beaton, Deputy Attorney General. Having considered the oral, documentary and video evidence introduced during the hearing, and having reviewed and considered the briefs and arguments of counsel, and being fully advised in the premises, the Hearing Officer enters the following Recommended Findings of Fact, Conclusions of Law and Order in this contested case.

FINDINGS OF FACT

1. In 1989 Mr. Hardy submitted an application for an NPDES (National Pollution Discharge Elimination System) Permit from the United States Environmental Protection Agency ("EPA"). This

NPDES Permit is required under controlling federal law in order to allow discharge of pollutants into receiving waters by any point source discharger. The proposed trout rearing facility at issue in this case would be a point source discharger requiring the issuance by EPA of an NPDES Permit allowing the facility to discharge pollutants into the receiving waters of the State of Idaho.

2. The location of the proposed fish hatchery is adjacent to the Snake River in a particular reach of the river known as the Middle Snake. The site of the proposed fish hatchery is owned by Mr. Hardy. The proposed fish hatchery would include a series of concrete raceways where the trout are raised and fed, a series of quiescent zones at the end of the raceways to collect and concentrate the pollutants, and a pipe system to eliminate solids and other pollutants prior to discharge into the river. The removed solids and other collected pollutants would then be used for dry land application and fertilizer off-site.

3. The particular NPDES Permit application at issue in this case is known as the Blind Canyon Permit Application No. ID-002693. Mr. Hardy owns a number of other fish farm facilities and processing plants located along the Middle Snake River which are not at issue in this proceeding. Mr. Hardy's other facilities have received NPDES Permits from EPA since the inception of the NPDES Permit System following adoption of the Federal Clear Water Act in 1972. These other facilities have been continuously permitted through successive applications and reissuance of permits, all

occurring prior to DEQ's April 19, 1991 denial of Mr. Hardy's Blind Canyon application upon referral by the EPA to DEQ for §401 approval.

4. The proposed Blind Canyon Facility has been designed to use 300 CFS of flow diverted from adjacent Box Canyon Creek. The design and layout of the proposed facility is similar to Mr. Hardy's other major facilities with the exception that the effluent treatment components at the proposed Blind Canyon Facility are considerably larger than his other facilities of comparable size. The effluent treatment facilities at proposed Blind Canyon Hatchery are three times as large as the treatment facilities at Mr. Hardy's facility located at Clear Lakes and his facility located at Rim View. The extra effluent treatment capacity was included in order to meet certain numeric discharge limitations imposed by EPA on fish hatchery NPDES Permits. Mr. Hardy ordered a specific design having additional treatment capacity so as to ensure compliance with the EPA established effluent discharge limitations. The evidence demonstrates that Mr. Hardy's Blind Canyon Facility, if constructed, would be adequate to utilize up to 300 CFS in-flow and still meet applicable EPA discharge limits so long as the facility were operated and maintained in a fashion similar to Mr. Hardy's other permitted facilities. Mr. Hardy's other operational and NPDES permitted facilities demonstrate that he is a competent and qualified operator concerned with complying at all times with EPA discharge limitations.

5. NPDES Permits issued by EPA to fish farm facilities in the Middle Snake River contain discharge limitations as follows:

a. Five parts per million total suspended solids based on a monthly average. (TSS)

b. Fifteen parts per million total suspended solids on an instantaneous maximum sample basis. (TSS)

c. 0.1 ml/l settleable solids. (SS)

The proposed Blind Canyon Facility could successfully comply with the EPA discharge limitations imposed by that agency on fish hatcheries in the Middle Snake River.

6. In this contested case proceeding, however, it is not enough for Mr. Hardy to simply demonstrate that he can successfully comply with the EPA technology-based permit effluent limitations. Mr. Hardy must also, as part of the 401 Certification process, provide reasonable assurance that the construction and operation of the hatchery will be conducted in a manner which will not violate applicable State of Idaho instream Water Quality Standards.

7. The Middle Snake River is a 94 mile reach of the river located generally between Milner Dam and King Hill. This stretch of the river is impacted by return flows from irrigated agriculture, fish hatchery effluent, hydroelectric development, sewer treatment plant discharge, spring flows and other factors. Below Milner Dam are five major hydroelectric impounds: Twin Falls Dam, Shoshone Falls Dam, Upper Salmon Falls Dam, Lower Salmon Falls

Dam, and Bliss Dam.

8. The Middle Snake River receives discharge from approximately 120 commercial fish hatchery operations located in the reach. These hatcheries are generally fed by natural spring flows which is required in the fish production operation.

9. Idaho Water Quality Standards prohibit discharge of pollutants from a single source or in combination of pollutants discharged from other sources that will violate Water Quality Standards. IDAPA §16.01.02080. A violation of Water Quality Standards occurs when a single source or combination of sources (1) will or can be expected to result in a violation of water quality standards applicable to the receiving waters or downstream waters, or (2) will injure designated or existing beneficial uses.

10. The Idaho Water Quality Standards designate a use or uses for State waters and establish water quality criteria necessary to protect the designated use. The designated uses established by the Board of Health and Welfare for the Middle Snake River are (1) agricultural water supply; (2) cold water biota; (3) salmonid spawning; and (4) primary contact recreation and secondary contact recreation.

11. The Board has adopted general or narrative criteria necessary to protect the designated uses already established for the Middle Snake River. Narrative standards relevant to this case include the following:

Deleterious Materials. Surface waters of the

state shall be free from deleterious materials (See Subsection 01.02003,07.) in concentrations that impair designated or protected beneficial uses...

Floating, Suspended or Submerged Matter. Surface waters of the state shall be free from floating, suspended or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may adversely affect designated beneficial uses...

Excess Nutrients. Surface waters of the state shall be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated or protected beneficial uses.

Oxygen-Demanding Materials. Surface waters of the state shall be free from oxygen-demanding materials in concentrations that would result in an anaerobic water condition.

12. The evidence presented in this case overwhelmingly demonstrates that as of April 19, 1991, the waters of the Middle Snake River violated Idaho's water quality standards. The evidence shows that the State's water quality standards for the Middle Snake River were being violated without consideration of any nutrients, solids, or other pollutants inevitably to be discharged from the proposed Hardy facility. As of April 19, 1991, and up to and including the hearing in this contested case, the receiving waters of the Middle Snake River had deteriorated to a condition such that the applicable Idaho water quality standards were being violated as a result of the then existing point and non-point loadings into the river.

13. Primary contact recreation, one of the designated

uses of the Middle Snake River, is considered to include swimming and waterskiing. Throughout the Middle Snake River reach, extensive plant growth consisting of rooted macrophytes, attached algae, phytoplankton and other plant growth has significantly impaired swimming and waterskiing recreation throughout this reach of the river. The video tape and pictorial evidence introduced during the course of the hearing discloses extensive plant growth throughout the river which has rendered the Middle Snake River unsuitable for swimming and generally undesirable to swimming enthusiasts. As to waterskiing, the evidence showed that boating throughout this reach has become difficult due to the tremendous accumulation of rooted macrophyte beds and extensive algal mats in the river impairing boat travel at all, much less boating of a kind or type sufficient to pull waterskiers.

14. Relatedly, as to the designated use secondary contact recreation, the evidence showed that plant growth on the river has significantly and negatively impaired secondary contact recreation including boating and fishing. Excessive plant growth throughout the river reach has prevented boats' ability to navigate in the river channel or to keep the propellers moving. As to fishing in this reach of the river, the testimony shows a gradual and general deterioration of sport fish or desirable fish species. Over the last ten years the desirable fish kinds and quantities in the river have deteriorated and there has developed a corresponding increase of undesirable pollution tolerant fish species including

suckers and carp.

15. As to both primary and secondary contact recreation, aside from problems resulting from excessive macrophytes and algal mats, the aesthetic appeal of the Middle Snake River had deteriorated to the point where members of the public now largely avoid this reach of the river for recreational purposes. Testimony described that the river water in places smelled bad and was unpleasant to even be around, much less swim in.

16. The designated beneficial uses of primary contact recreation and secondary contact recreation are not being supported by water quality conditions in the Middle Snake River.

17. The testimony and record in this case demonstrates that the receiving waters of the Middle Snake River do not support the designated beneficial use relating to cold water biota. Cold water biota serve as an excellent indicator of the relative health of a river system. A high diversity of cold water species located throughout a river reach generally indicates a balanced, stable and overall good water quality reach of the river.

18. Cold water biota in the Middle Snake River now are largely restricted to areas under direct influence of the clean and cold natural spring flows. At locations below point source discharges, including points of discharge from fish hatcheries, no cold water biota live. Between the extreme of clean spring flows on the one hand and outfalls of hatcheries on the other, the presence of cold water biota decreases gradually across the river

channel. Cold water biota, such as amphipods, fresh water shrimps or scuds, the cold water snails, the burrowing mayflies, and the caddis flies will simply disappear as one moves across the channel from a spring source into effluent receiving areas.

19. The testimony indicated that macroinvertebrates, such as cold water molluscs, are very good indicators of a healthy river system because such creatures require cold, clear, well-oxygenated and low nutrient waters. Similarly, where there is a diverse mollusc population in a river reach, there will necessarily be present diverse types of insects, fish and flora.

20. The native cold water molluscs in the Middle Snake River have declined dramatically. In place of the native cold water molluscs, requiring cold, clear and clean water, there has developed a proliferation of undesirable pollution tolerant mollusks, primary the New Zealand mud snail. This introduced New Zealand mud snail, which is able to tolerate much higher pollution levels, is now the dominate mollusc in the Middle Snake River. This introduced and undesirable mollusc is even capable of living in nutrient enriched weed beds which cannot support any native cold water biota.

21. As of the date of the hearing, the United States Fish and Wildlife Service had proposed that five native mollusc species in the Middle Snake River be listed as endangered under the Federal Endangered Species Act. The record shows that the United States Fish and Wildlife Service concluded that the cold, clear and

well-oxygenated Snake River habitats required by the five species were threatened by several factors including water pollution, reduction in oxygen concentration and competition from the undesirable New Zealand mud snail.

22. In terms of biological diversity of cold water biota, the Middle Snake River system is becoming a very simple system with a marked reduction of pollution intolerant species. Based upon an assessment of the cold water biota, the aquatic ecosystem of the Middle Snake River is near collapse, meaning that this river system is deteriorating to the point that many of the native plant and mollusc species could potentially go extinct.

23. The causes of the decline in native cold water biota and a reduction in the cold water biota diversity are nutrient loading, sedimentation, and organic solids being deposited into the river.

24. As to the designated beneficial use of salmonid spawning, the evidence shows that salmonid spawning has been virtually eliminated throughout much of the main stem of the Middle Snake River. Trout spawning is largely now confined to the cold, clear and well-oxygenated spring areas. Currently, trout are pretty much limited to the areas directly impacted by the springs, such as the clean water zone in the river at the mouth of Box Canyon Creek. This clean water zone at the mouth of Box Canyon Creek is one of a dwindling number of refugia that support salmonid spawning in the Snake. A combination of organic loadings, dense

macrophyte beds, low oxygen and sedimentation has eliminated most of the bottom sub-strate of the river in terms of its availability for spawning.

25. The evidence in this case demonstrates that there are existing violations of the six part per million dissolved oxygen standard within the deeper pools and within dense macrophyte beds in the Middle Snake River. The record further demonstrates that dissolved oxygen concentrations fall below the State established minimum standards during the evening hours. In addition, there are areas within the Middle Snake River where anaerobic sediments are located, including at the outfall of fish hatcheries. Within this anaerobic sediment, the dissolved oxygen concentrations are by definition zero and remain below the State established minimum standards in the water column for some distance off the river bottom.

26. The Board's rules define "deleterious material" to include "any substance which may cause the... reduction of the usability of water without causing physical injury to water users." IDAPA §16.01.02003.07. The Board's regulation adopting a narrative water quality standard, IDAPA §16.01.02200,02 provides that surface waters of the state shall be free from deleterious materials in concentrations that impair designated or protected beneficial uses. The widespread plant growth throughout the reach of the Middle Snake River, including rooted and unrooted macrophytes, epiphytic algae, filamentous algae, and phytoplankton blooms are all

substances which may cause and in fact do cause the reduction of the usability of the waters of the Middle Snake River without causing physical injury to water users. These plants, phytoplankton blooms and algal blooms are deleterious materials which appear in the reaches of the Middle Snake River in concentrations which impair designated beneficial uses.

27. The Board has declared that surface waters of the state shall be free from floating, suspended, or submerged matter of any kind in concentrations cause nuisance or objectionable conditions or that may adversely affect designated beneficial uses. IDAPA §16.01.02200,04. Nuisance has been defined by the Board to mean anything which is injurious to the public health or an obstruction to the free use, in the customary manner, of any waters of the state. Throughout the reach of the Middle Snake River, there are concentrations of macrophytes, algae, organic solids discharged from trout rearing facilities, individually and in combination with each other which constitute floating, suspended or submerged matter in concentrations causing nuisance and objectionable conditions which adversely effect designated beneficial uses for the Middle Snake River.

28. The Board has by rule declared that surface waters of the state shall be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated or protected beneficial uses. The receiving waters of the Middle Snake River, both as of April 19, 1991 and as of the

date of the hearing in this matter, contained excess nutrients resulting in visible slime growths and other nuisance aquatic growths that impair protected beneficial uses established for this reach of the river.

29. The principal nutrients limiting aquatic plant growth in the reach of the Middle Snake River are nitrogen and phosphorus. Phosphorus is the primary limiting nutrient in the Middle Snake River since there are adequate levels of nitrogen already entering the river from springs and other sources generally. Nitrogen may be a limiting factor at certain times if there is substantial depletion of nitrogen in river sediments due to uptake by rooted macrophyte beds.

30. Dissolved nutrients, particularly orthophosphorus, are rapidly taken up by aquatic plants. If sufficient nutrients are available in either the sediments or the water column, aquatic plants will take up and store an abundance of such nutrients in excess of the plant's actual need, a phenomenon recognized as luxury uptake. During the life of the aquatic plant, whether macrophyte or algae, the plant will continue to store phosphorus in its tissue in quantities far in excess of the plant's immediate need. At the death of the plant, the tissue will decay in the water column and the nutrients stored within the plant bio mass will be either restored to the water column or become incorporated into the river sediment. As a result of this process, nutrients, including orthophosphorus, that are initially discharged into the

water column in a dissolved form will eventually become incorporated into the river bottom sediment. Once such nutrients are incorporated into the river sediment, they are available once again for uptake by yet another life cycle of rooted aquatic macrophytes and other aquatic plants. Moreover, as to those portions of the river experiencing anaerobic sediment conditions, phosphorus is released directly back into the water column to become available for increased algal and macrophyte production in the immediate area and downstream of such anaerobic locations.

31. Rooted aquatic plants are able to uptake nutrients, including phosphorus, through both roots embedded in the sediment and through plant tissue taking nutrients directly from the water column. These plants, again, will exhibit luxury uptake when sufficient nutrients are present in order to store such nutrients within the tissue of the plant. As the life cycle of the plant progresses, those stored nutrients are once again contributed and recontributed into the water column and into the sediments. In both rooted plants and non-rooted aquatic plants, the deposit and redeposit of nutrients from the water column, into the plant tissue, back into the sediment and then reused for successive generations of plants is a process known as nutrient spiraling or nutrient cycling. Within this process of nutrient spiraling, nutrients, including orthophosphorus, which enter the river are used and reused successively to foster and allow later and greater plant growth in higher concentrations down stream. The evidence

shows that the loading of nutrients into the Middle Snake River at the time of the DEQ denial in April, 1991 and up to and including the time of the hearing have caused visible slime growths and other nuisance aquatic growths impairing designated or protected beneficial uses of the river.

32. The evidence shows that nutrient concentrations in the Middle Snake River exceed the present assimilative capacity of the river. Assimilative capacity, as used in this finding and as defined by expert testimony in the hearing, is the ability of the river to receive such nutrients without resultant violations of water quality standards.

33. During this contested case hearing, Mr. Hardy devoted a substantial portion of the hearing to developing expert testimony in support of the proposition that any nutrients discharged from the proposed Hardy facility would have no impact on plant growth in the Middle Snake River because there already existed levels of nutrients in the river, and indeed even from unimpacted springs, necessary to support maximum growth rates of aquatic plants. Mr. Hardy's experts testified at length that the maximum growth rates for aquatic plants would occur, in terms of orthophosphorus, at concentrations between .015 and .03 mg/l. Mr. Hardy's experts testified that the concentrations of nutrients even in unimpacted springs are within this range of the limiting nutrient orthophosphorus and therefore the receiving waters of the Middle Snake River are sufficient to support maximum growth rates

whether or not any point source nutrients are discharged and whether or not Mr. Hardy's facility is ultimately approved and operational. In other words, Mr. Hardy's experts opined that there are sufficient concentrations of background nutrients in the receiving waters to sustain maximum plant growth rates and therefore the additional annual loading from the proposed Hardy facility of tons of phosphorus, solids and other pollutants would not impact plant growth rate in the river.

The expert testimony in this case generally agreed with the assessment that maximum growth rates for both algae and macrophytes can occur in the .015 to .03 mg/l range for phosphorus. However, the scientific and expert evidence overwhelmingly showed that the focus upon "maximum growth rate" does not truly address the affect of nutrient loadings in concentrations above .03 mg/l in terms of plant bio mass extent and accumulations in the river. Expert testimony in this case clearly shows that the lateral and downstream extent and density of plant growth will increase with increased nutrient loading to the river even if the river already contained .015 to .03 mg/l phosphorus.

34. The scientific evidence in this case demonstrates that there is a well recognized distinction between "growth rates" and algal and macrophyte bio mass accumulations in a river system. Growth rates generally reflect the amount of new plant tissue produced per a given unit of time, that is, how quickly a plant will develop and grow. Bio mass accumulation, on the other hand,

measures the density and lateral and downstream extent of plant growth across a river. Therefore, although increased nutrient loading may not increase maximum growth rate for a given unit of time for aquatic plants if concentrations are above .03 mg/l phosphorus in the receiving water, the amount of net plant bio mass growth and accumulation lateral and downstream will increase. Consequently, a phosphorus concentration in the receiving water above .03 mg/l, although not having an immediate impact on plant growth rate at a given time, would certainly result in increased aquatic plant growth downstream. Due to factors such as luxury uptake, nutrient spiraling, and accumulation of nutrients in the sediment for later use and reuse by plant communities, additional nutrient loading into the river will be stored in the system and will be used downstream to support greater plant bio mass development.

35. With regard to Mr. Hardy's expert evidence that maximum plant growth rates are achieved at .015 to .03 mg/l of phosphorus, this opinion evidence does not address or resolve the instream water quality standards requiring protection of cold water biota, and salmonid spawning. The evidence in the record clearly shows that nutrient loadings to the river have severely and negatively impacted the protected beneficial uses relating to cold water biota and salmonid spawning.

36. Several of Mr. Hardy's expert witnesses testified that the excessive and undesirable amount of plant growth within

the reach of the Middle Snake River was attributable in large part to reduced flows from the 6-year drought within the Snake River drainage. Even if the instream water quality violations are in some part due to reduced flows, this fact cuts against §401 Certification rather than in favor of granting §401 Certification in this case. The instream water quality standards adopted by the Board do not apply only in high flow years. Nor are they waived during low flow years. Neither the legislature nor the Board has seen fit to waive or suspend application of the instream water quality standards during periods of low flow years. Whether or not this could or should be done is beyond the scope of this hearing and not relevant to this proceeding.

37. The evidence shows that the amount of nutrients in the sediment has a direct causal relationship to the production of plant growth, especially rooted macrophytes. Sediment and nutrient concentrations may be up to 1,000 fold or more of the concentrations of the water column and directly relate to the bio mass plant production in the Middle Snake River.

The river bottom sediments become overenriched as nutrients are added to the water in either soluble or suspended form. Nutrients are attached in the water column to other materials, such as suspended organic matter or clay particles, and together settle out rapidly into the sediment when velocity is reduced in the river. When velocity within the river falls below two-tenths of a foot per second, the nutrients together with their

attached particles settle out rapidly. Such velocities, and even velocities approaching zero, are attained in most of the weed beds which exist in the reach of the Middle Snake River. Under the lower oxygen conditions which obtain in the sediments, phosphorus, ammonia or some nitrate may be solubilized and readily available for uptake by the root systems. The soluble nutrients, meanwhile, become absorbed directly by the attached algal film on plants already in the water stream. These nutrients from the sediment are also taken up directly from the water in soluble form by attached algal film and by the epiphytic streamers of filamentous algae.

38. There are many recognized mechanisms within the Middle Snake River to store nutrients and sediments, through storage along the bank, on the river bottom, and in weed beds. The river system itself is structured for a maximized retention of nutrients so as to use nutrients on a recycling basis as often as possible as the waters flow downstream. If an uptake or utilization mechanism does not occur at a given point along the river, nor at some point one or two miles downstream, the uptake will inevitably occur at some point downstream. This is the problem experienced throughout the reach of the Middle Snake River. As nutrient concentrations have increased, and nutrient settling out into sediments has become more and more abundant, these nutrients are passed downstream and will be taken up at the first point possible to sustain enhanced plant bio mass growth downstream.

39. Nutrient concentrations in the water column which exceed a given plant community's ability to absorb nutrients at that particular location will simply extend the plant bio mass, weed beds and plant growth further downstream. The distance downstream that the bio mass and plant beds will extend is proportional to the excess in nutrient concentration over the maximum concentration necessary to ensure maximum growth rate.

40. Additional loading in to the Middle Snake River of any form of phosphorus or nitrogen will increase macrophyte growth, result in additional sediment deposits, and increase plant beds and plant bio mass laterally and downstream.

41. The major nutrient constituents of fish hatchery effluent discharge are total phosphorus, orthophosphorus, ammonia, total Kjeldahl nitrogen, and nitrates. These nutrients contributed by fish hatchery discharges contribute to accumulation of nutrient rich sediment in the Middle Snake River. Organic rich, nutrient rich sediments are dramatically increased below fish hatchery discharge points.

42. Additional loadings of nutrients from the proposed Hardy Blind Canyon Facility would exacerbate existing water quality standard violations. The evidence shows that the proposed Hardy facility, based upon a design of 300 CFS of flow through the facility, would discharge on an annual basis, 1,099 tons of solids, 167.72 tons of ammonia nitrogen, 249.1 tons of Kjeldahl nitrogen, 36.75 tons of total phosphorus and 23.1 tons of dissolved

phosphorus. The additional nutrients which would be discharged from Hardy's proposed facility if it became operational would aggravate and exacerbate plant growth, macrophyte beds, algal mats, phytoplankton blooms, both in the area of discharge and downstream and would result in increased plant bio mass further violating the instream water quality standards. Additional nutrients discharged from the proposed Hardy facility would further impair designated uses protected under the Idaho water quality standards, including primary contact recreation, secondary contact recreation, cold water biota and salmonid spawning.

43. The proposed Blind Canyon Facility would draw approximately 300 CFS from Box Canyon Creek. This diversion would have a significant impact on the remaining flow of Box Canyon Creek and would result in a substantial diminution of the clean water zone now present at the mouth of Box Canyon Creek. The clear water zone at the mouth of Box Canyon Creek is one of the few remaining areas in the river that supports a diverse and healthy population of cold water biota, including the Shoshone sculpin, rainbow trout and the Bliss rapid snail which have been proposed as endangered species by the Federal Government. The diversion from Box Canyon Creek would wipe out the remaining populations of the Bliss rapid snail now present in the clean water zone and decimate as well the Shoshone sculpin population located there. Trout spawning and habitat located within the clean water zone would be negatively and severely impacted.

44. As noted above, Mr. Hardy applied to EPA for an NPDES Permit for the Blind Canyon Fish Hatchery in 1989. Pursuant to Federal NPDES procedures, the EPA in March, 1990 issued a Notice of Intent to reissue 43 existing permits for fish hatcheries already in operation in the Middle Snake River and to issue 19 new NPDES Permits for fish hatcheries which have either been unpermitted or which were new discharges into the waters of the Middle Snake River and its tributaries. Mr. Hardy's Blind Canyon Facility was one of the 19 new permits. Thereafter, Mr. Hardy withdrew one of his applications for a new permit for reasons not germane to this proceeding.

45. DEQ commented on Mr. Hardy's proposed Blind Canyon Facility and requested that EPA defer issuance of any permit for this new facility pending completion of an environmental impact statement. This request from DEQ to EPA was dated April 10, 1990. This request was in the nature of a comment and recommendation only and did not constitute a water quality certification or a denial of water quality certification under §401. DEQ believed that preparation of such an environmental impact statement by the federal government would have provided additional information regarding the proposed facility in terms of likely impacts on water quality.

46. In July, 1990 USEPA issued final draft permits for the 43 existing fish hatchery facilities being repermitted and for 17 new permits for facilities which had either been unpermitted in

the past, despite being operational, or for new discharging facilities. At the same time, EPA requested DEQ water quality certification under §401 of these proposed permits. Included within this July, 1990 batch of proposed final draft permits from EPA, were permits for all of Mr. Hardy's other operational fish hatcheries which had previously been permitted by EPA. In early August, 1990, the Department issued water quality certification under §401 for all of these batch of proposed permits, including all of Mr. Hardy's other permitted facilities. However, EPA did not include within the July, 1990 batch of proposed NPDES Permits any permit for the proposed facility at issue in this case. The final draft permit for Mr. Hardy's Blind Canyon Facility, No. ID-002693 was not included within the batch of draft permits sent by EPA to DEQ for §401 Certification.

47. Prior to granting §401 Certification in August, 1990 for Mr. Hardy's other facilities and for the other facilities included within the EPA batch, the Department had serious and genuine concerns about the deterioration of water quality in the Middle Snake River. Visual monitoring of the river showed significant impairment of the designated beneficial uses established for this reach of the river and produced genuine concerns that the instream water quality standards were already being violated as of August, 1990. In order to obtain instream water quality chemistry analyses, the Department contracted with an independent consultant to design and conduct instream water quality

monitoring of pollution loads, nutrients, and concentrations of pollutants at various monitoring stations throughout the river. This study was also to include analyses of loads and concentrations discharged from point source dischargers, including fish hatcheries, in the Middle Snake River reach. The actual instream monitoring and data collection began in the summer of 1990.

48. In September, 1990 DEQ began to receive preliminary data from this independently conducted instream water quality monitoring program. The data indicated that the Middle Snake River had become overloaded with nutrients and that EPA suggested criteria for phosphorus concentrations had become exceeded in various parts of the river. This instream monitoring preliminary data was consistent with and confirmed DEQ's determinations that the river had become overloaded with nutrients as evidenced by excessive plant growth, impairment of designated uses, and overall deterioration of water quality in this reach of the river.

49. DEQ's concerns about water quality, excessive nutrients, and existing instream violations prompted DEQ to list this reach of the river in September, 1990 as water quality limited under applicable federal statutes and regulations. EPA has since recognized and approved the listing of the Middle Snake River as water quality limited under §303D of the Clean Water Act (33 USC §1313(d)).

50. Following DEQ'S §401 Certification of the August, 1990 batch of permits, DEQ continued to receive data from the

independent nutrient monitoring study and to analyze that data in terms of existing river quality conditions. The Department, based upon this data and instream water quality conditions, determined that the Middle Snake River had become overloaded with nutrients, sediments and organic solids resulting in violations of the existing and applicable Idaho water quality standards. Inasmuch as the river did not meet existing water quality standards, the Department properly determined that the introduction of additional pollutants, nutrients or solids could and would only aggravate and exacerbate the already existing water quality violations. Consequently, as of approximately March, 1991 DEQ had made the determination that additional nutrients loadings into the river could no longer receive §401 Certification from DEQ. This determination was based upon the then existing instream water quality violations and the recognition that additional nutrients, solids and other pollutants would result in further deterioration and degradation of the receiving waters of the Middle Snake River.

51. In April, 1991 EPA sent a final draft permit to DEQ regarding Mr. Hardy's Blind Canyon application and requested that the Department conduct its §401 Certification process as quickly as possible. Based upon the Department's determination that applicable water quality standards were at that time already being violated, and that introduction of effluent from Mr. Hardy's facility would only aggravate and exacerbate instream violations, the Department denied §401 Certification.

52. DEQ's decision to deny §401 Certification to Mr. Hardy was not motivated or made upon any bias or prejudice or other improper motive against Mr. Hardy personally or against any of his corporations or against his other facilities. As noted above, all of Mr. Hardy's then existing and operational facilities had been re-permitted by EPA and had received DEQ's §401 Certification approval almost nine months before DEQ's April 19, 1991 denial of §401 Certification approval for the proposed Blind Canyon Facility. DEQ officials and staff devoted substantial discussion, review, analysis and consideration of the water quality issues in the Middle Snake River prior to making a determination that additional nutrients could and would only exacerbate and aggravate already existing instream water quality violations.

53. The decision by DEQ in April, 1991 to deny §401 Certification as to Mr. Hardy was based upon analyses of instream water quality conditions, nutrient loads, and upon a review of the applicable water quality standards and criteria. The only permit submitted to and considered by the Department in April, 1991 for §401 Certification was Mr. Hardy's Blind Canyon application. In denying §401 Certification to the proposed facility, DEQ did not act arbitrarily or capriciously and did not treat Mr. Hardy any differently than any other applicant similarly situated at that time.

54. Shortly after denial of §401 Certification to Mr. Hardy, the DEQ Central Office issued instructions and guidance to

the Twin Falls Field Office regarding §401 Certifications from that time forward in order to provide information to the regulated public as to how DEQ assessed current instream water quality conditions and regarding how future §401 Certification requests would be uniformly addressed by DEQ. The record does not contain any evidence showing that DEQ, in denying §401 Certification to Mr. Hardy in April, 1991, unlawfully discriminated against him or treated him differently than any other §401 Certification applicant similarly situated as of April, 1991. Nor is there any evidence in this record that as of the present date Mr. Hardy had been treated differently than any other §401 Certification applicant following the well founded determination by the Department as of March, 1991 that the Middle Snake River was overloaded with nutrients resulting in instream water quality violations contrary to the statutes and regulations of the Board.

55. It is recognized that the aquaculture industry is a valuable economic resource to the State of Idaho and particularly to the residents and communities located within and along the Middle Snake River. Testimony demonstrated that the aquaculture industry generates approximately \$70 million dollars annually in sales and revenues. As one subcategory of the overall agriculture industry in Idaho, aquaculture is, in terms of environmental impacts, perhaps the best operated and least pollution generator in terms of effluent and deleterious environmental impacts. Mr. Hardy, as noted above, has demonstrated that he and his corporate

entities are very sensitive to meeting all applicable discharge limits in order to minimize negative impacts associated with all of his production facilities. Mr. Hardy's efforts and beliefs in this regard are praiseworthy. However, neither the DEQ nor this Board can grant §401 Certification for the discharge permit at issue in this proceeding in violation of applicable law and contrary to the established instream water quality standards and criteria. For the Board to grant §401 Certification in this case, in view of the evidence presented during the contested case proceeding, would require this Board to knowingly and intentionally violate controlling legal principles and its own regulations. This the Board cannot do.

56. Beginning with the nutrient monitoring study commencing in the summer of 1990, and up through the present, DEQ has been actively engaged in the process of developing a total maximum daily load for those pollutants causing water quality standard violations from all point and non point sources. This project is underway but as of the date of hearing not yet completed. The process of developing a total maximum daily load is to identify nutrients, sediments and other loadings from all sources and to develop strategies and workable solutions to reduce such loadings and pollutants in order to bring the water quality limited Snake River reach into compliance with the applicable water quality standards and criteria. The Department has likewise been engaged in the process of working with EPA to generate a computer

model for the Middle Snake River to determine strategies for improving the river's capacity to assimilate nutrients, sediments, and organic solids so as to eliminate violations of water quality standards.

57. In addition to the total maximum daily load process, the Department is in the process of developing a nutrient management plan pursuant to the Idaho Nutrient Management Act, I.C. §39-105. DEQ, as a part of that process, is working with industries and other governmental agencies to develop an overall nutrient management plan for the Middle Snake River. This process likewise will address the complex factors involved in nutrient loading, sedimentation, plant growth and existing violations of water quality standards. These projects are ongoing and are directed toward the reduction of sediment and pollutants in the river so that applicable water quality standards can be met. Although these programs and processes are perhaps beyond the scope of this contested case proceeding, it is important that DEQ continue to develop strategies and programs to bring the receiving waters of the Middle Snake River into compliance with the applicable water quality standards.

CONCLUSIONS OF LAW

1. To comply with the Federal Clean Water Act, codified as amended at 33 U.S.C. §1251-1387, a person wishing to discharge pollutants into waters of the United States must secure an NPDES Permit from the Federal Environmental Protection Agency. EPA may

not issue an NPDES Permit unless the resulting discharge will comply with State Water Quality Standards. 33 U.S.C. §1311(b)(1)(C), 1342. Before EPA may issue a permit, it must also provide the state in which the discharge originates with an opportunity to review the draft NPDES Permit to determine whether the permit's terms ensure compliance with the state's existing Water Quality Standards.

2. Under Federal law, every applicant for a Federal permit or license must present to the permitting agency a State Certification ("401 Certification") that the proposed activity will not violate water standards. This is spelled out in 33 U.S.C. §1341, as follows:

Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the state in which the discharge originates or will originate, or if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of §1311, §1312, §1313, §1316 and §1317 of this title.

33 U.S.C. §1341(a)(1).

3. Regulations adopted by the U.S. Environmental Protection Agency (EPA) elaborate on this requirement, and specify the contents of the certification required for Federal Water Pollution Discharge Permits ("NPDES Permits"):

A statement that there is a reasonable assurance that the activity will be conducted in a manner which will not violate applicable water quality standards.

40 C.F.R. §121.2(a)(3). This provision has been held to encompass construction of facilities under federal permits as well as the operation of facilities. *Monongahela Power Co. v. Marsh*, 809 F.2d 41 (D.C. Cir. 1987) cert. denied 108. S.Ct. 68, 98 L.Ed.2d 32.

4. In the State of Idaho, the Department of Health and Welfare has been designated as the agency to grant or deny certification under §401. Idaho Code §39-105; 1972 IDAHO SESSION LAWS, Chapter 347, p. 1017, §5; 1967 IDAHO SESSION LAWS, Chapter 311, p. 870, §12.G accord *Shokal v. Dunn*, 109 Idaho 330, 340-341, 707 P.2d 441 (1985).

5. To be successful in obtaining a §401 Certification from the state, the applicant must meet his burden to show that his proposed discharge will not violate the Idaho Water Quality Standards, IDAPA §16.01.02001 et seq.

6. It is not enough that an application merely show that the proposed discharge will not violate EPA Permit effluent limitations. (*E.g.*, *Miners Advocacy Council v. State*, DEC, 778 P.2d 1126 (Alaska 1989) cert. denied 110 S.Ct 1127, 107, L.Ed.2d 1033 (401 Certification improper as to those mines which, even though meeting .2 ml/l effluent limitation, would result in exceedence of .1 ml/l instream, water quality standard); 33 U.S.C. §1341(a)(1), *supra* (The 401 Certification also goes to compliance

with Effluent Limitations under §1311, Water Quality Related Effluent Limitations under §1312, Water Quality Implementation Plans under §1313, National Standards of Performance under §1316, and Toxic and Pretreatment Effluent Standards under §1317.)

7. The Department's statutory authority related to Idaho waters includes the "supervision and administration of a system to safeguard the quality of the waters of this State, including but not limited to the enforcement of standards relating to the discharge of effluent into the waters of this State." I.C. §39-105(3)(k). The Department is also responsible for formulating and recommending standards to address water pollution to the Board. I.C. §39-105(2).

8. The Health and Welfare Board ("Board") has declared that the waters of the Middle Snake River are to support the following "designated beneficial uses": agricultural water supply, cold water biota, salmonid spawning, primary contact recreation and secondary contact recreation. IDAPA §§16.01.02150,01.dd and ii. As waters designated for cold water biota and salmonid spawning, the Middle Snake River is required to exhibit dissolved oxygen concentrations "exceeding 6 mg/l at all times." IDAPA §§16.01.02250,02.b.iii.(c)i and 02250.d.

9. The Board's Rules also states that, "[w]herever attainable, surface waters of the state shall be protected for appropriate beneficial uses which...includes all recreational use in and on the water surface and the preservation and propagation of

desirable species of aquatic biota..." IDAPA §16.01.02050,02.a. The Rules require that, "[i]n all cases, existing beneficial uses of the waters of the state shall be protected." IDAPA §16.01.02050,02.c.

10. Idaho's "antidegradation policy" specifies that "[t]he existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." IDAPA §16.01.02051,01. The Rules also specify that "all surface waters of the state" are to be protected for wildlife habitat (where currently suitable or intended for such habitat) and for aesthetics. IDAPA §16.01.02100,04 and 05.

11. The Board also has adopted seven "General Surface Water Criteria" which, as narrative standards, "apply to all surface waters of the state, in addition to the water quality criteria set forth for specifically classified waters." IDAPA §16.01.02200. Four of these narrative standards are particularly relevant to this case:

Deleterious Materials. Surface waters of the state shall be free from deleterious materials (See Subsection 01.02003,07.) in concentrations that impair designated or protected beneficial uses...

Floating, Suspended or Submerged Matter. Surface waters of the state shall be free from floating, suspended or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may adversely affect designated beneficial uses...

Excess Nutrients. Surface waters of the state shall be free from excess nutrients that can

cause visible slime growths or other nuisance aquatic growths impairing designated or protected beneficial uses.

Oxygen-Demanding Materials. Surface waters of the state shall be free from oxygen-demanding materials in concentrations that would result in an anaerobic water condition.

IDAPA §16.01.02200,02, 04, 05, and 06.

12. The State Water Quality Standards do not deal only with the nature of the effluent. Rather, the standards, like the Clean Water Act itself, also obligate the state or federal regulators to evaluate other factors that, in combination with the pollutant content of the proposed discharge, will affect water quality. For example, DEQ is obligated to determine the degree of pre-discharge treatment required based on: a) uses made or desired to be made of the receiving water; b) volume and nature of flow of the receiving water; c) the quantity and quality of the wastewater being treated; and d) the presence of other pollution sources in the stream segment. IDAPA §16.01.02401,02. These rules also are consistent with federal regulations implementing the Clean Water Act. See, e.g., C.F.R. §122.24(c)(1)(i) (requiring evaluation of the "location and quality of receiving waters" with regard to determining whether certain fish hatcheries will be subject to NPDES requirements).

13. A permit applicant is not entitled to have his proposed waste stream evaluated by itself, in the abstract. It must be considered in the context of the receiving water quality

and the beneficial uses it is designated to serve. Cumulative effects also must be considered ("the presence of other sources of pollution in the stream segment"); as is shown in the record of this case many years of pollutant loading from a variety of sources, have combined to degrade water quality in the Middle Snake.

14. Water quantities must be considered ("volume and nature of flow of the receiving water"); in this case, reduced flow due to drought is a mandatory consideration in any decision about treatment. Indeed, federal regulations governing the NPDES program even require that, before granting a permit (or deciding on what permit conditions to impose), the permitting agency must evaluate the effect of the receiving water in diluting the effluent. 40 C.F.R. §122.44(d)(1)(ii). This regulation provides that each NPDES Permit must include, among other things, conditions or requirements necessary to "[a]chieve water quality standards established under [the Act], including State narrative criteria for water quality." This regulation also includes the requirement concerning the ability of the receiving water to dilute the effluent:

When determining whether a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above a narrative or numeric criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the

effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water.

15. Under Idaho law, a violation of water quality standards occurs when pollutants, such as nutrients and biological material, are

discharged from a single source or in combination with pollutants discharged from other sources in concentrations or in a manner that:

- a. Will or can be expected to result in violations of the water quality standards applicable to the receiving water body or downstream waters; or
- b. Will injure designated or existing beneficial uses.

IDAPA §16.01.02080,01 (emphasis added).

16. The Idaho Water Quality Standards are somewhat dictated by federal law. States are required to submit water quality standards to EPA for approval under the Federal Water Pollution Control Action (Clean Water Act). See 33 U.S.C. §1313. The Clean Water Act and implementing regulations set forth minimum requirements for state water quality standards. See 40 C.F.R. Part 131. If a state fails to submit water quality standards to EPA for approval or if EPA does not approve a state's water quality standards, EPA is required to promulgate enforceable water quality standards for the state. *Id.* Idaho's Water Quality Standards have been submitted to and approved by EPA.

17. EPA regulates point source discharges into Idaho waters through a permit system which establishes technology-based effluent limitations. The permit system is known as the National Pollutant Discharge Elimination System ("NPDES"). See 33 U.S.C. §1342. While Congress intended to restrict federal permitting to technology-based effluent limitations, the states, through state water quality standards, were intended to play an integral part in maintaining the integrity of state waters. See 33 U.S.C. §1285. Consistent with the intent of the Clean Water Act in delegating to the states the authority to enforce water quality standards, Congress authorized states to issue water quality certification for all federal permits that may result in the discharge of pollutants into state waters. See 33 U.S.C. §1341. The state may deny water quality certification if there is not a reasonable assurance that the discharge will comply with water quality standards irrespective of compliance with technology-based effluent limitations. A federal permit will not be issued if the state denies water quality certification.

18. The water quality criteria necessary to protect the designated uses can be "expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use." See, e.g., 40 C.F.R. §131.3(b). Where a water body has been designated with multiple-use designations, the narrative or numerical criteria shall support the most sensitive use. See IDAPA §16.01.02070,01; 40 C.F.R.

§131.11(a).

19. Although an applicant may demonstrate that his proposed facility's discharge could comply with technology-based effluent limitations set by EPA as part of the NPDES Permit, such a demonstration does not answer or even necessarily address the question of whether such proposed discharge will violate existing state water quality standards or exacerbate already present violations of state water quality standards.

20. Since Appellant is applying for a permit or a license to do what would otherwise be unlawful to do, that is pollute the waters of Idaho, it is Appellant's burden to show that the construction and operation of Mr. Hardy's fish hatchery will not violate Idaho Water Quality Standards. See *Big Fork Mine Co. v. Tenn. Water*, 620 S.W.2d 515 (Tenn. App. 1981) (burden of proof was on applicant for point source permit to demonstrate that water quality standards will not be violated); *Power Auth. State of N.Y. v. Williams*, 475 N.Y.S.2d 901 (A.D.3d Dept. 1984) (applicant for hydroelectric project did not satisfy the burden of proof that the construction and operation of the hydroelectric project would not violate water quality standards); see also *State of Okla. v. EPA*, 908 F.2d 595, 629 n.49 (10th Cir. 1990), *rev'd on other grounds*, 60 U.S.L.W. 4176 (February 26, 1992) (applicant for NPDES Permit has the burden to demonstrate that the point source discharge will not violate water quality standards of a downstream state); *United States Steel Corp. v. Train*, 556 F.2d 822 (7th Cir. 1977) (burden

of proof is on applicant to show entitlement to obtain an NPDES Permit since discharge of pollutants without a permit is otherwise unlawful); see also *Shokal v. Dunn*, 109 Idaho 330, 707 P.2d 441 (1985) (in applying for a permit to appropriate waters, it is the burden of the applicant to demonstrate compliance with the local public interest, including compliance with Idaho Water Quality Standards.) See also IDAPA §16.05.03101,16 (Petitioner usually has burden of proof at a contested case hearing).

21. Placing the burden of proof on Mr. Hardy to prove that there is a reasonable assurance that Idaho Water Quality Standards will not be violated by the construction and operation of the facility is also consistent with general principles of administrative law. See, e.g., 73A C.J.S. §128 at 35 (1985). In an administrative proceeding, the general rule is that the burden of proof is on an applicant for benefits or privileges. One who seeks a permit or a license has the burden of proving eligibility to the satisfaction of the licensing authority. See *Williams v. Scott*, 278 Ark. 453, 647 S.W.2d 115 (1983). Thus, it was Mr. Hardy's burden at the contested case hearing to prove that there is a reasonable assurance that the construction and operation of his facility will not violate Idaho Water Quality Standards.

22. As a general rule, matters in issue in an administrative proceeding must be established by a preponderance of the evidence. See *Walker v. Bd. of Pardons*, 803 P.2d 1241 (Utah 1990) (burden of proof is by preponderance of the evidence in

administrative proceedings); see also *Martin v. Ambach*, 443 N.E.2d 953 (N.Y. 1980) (party asserting the affirmative on an issue being tried before an administrative tribunal is required to prove its allegations by preponderance of the credible evidence.)

23. Thus the issue in this case is whether there is substantial competent evidence to support either party's position that the construction and operation of Mr. Hardy's proposed Blind Canyon Fish Hatchery will or will not violate Idaho Water Quality Standards.

24. At the time of DEQ's denial on April 19, 1991, and up through and including the date of hearing, the State's instream water quality standards were being violated. Additional discharge from the proposed facility would exacerbate and aggravate already existing Idaho water quality standard violations.

25. Water quality in the Middle Snake River does not support the designated beneficial uses for that reach of the river.

26. The designated beneficial uses of primary contact recreation and secondary contact recreation are not being supported by current water quality conditions in the Middle Snake River.

27. The receiving waters of the Middle Snake River do not support the designated beneficial use relating to cold water biota. The waters of the Middle Snake River do not support the designated beneficial use of salmonid spawning.

28. Within the Middle Snake River reach, there are

existing violations of the six parts per million dissolved oxygen standards, particularly within the deeper pools and within dense macrophyte weed beds.

29. The wide spread plant growth throughout the reach of the Middle Snake River, including rooted and unrooted macrophytes, epiphytic algae, filamentous algae and phytoplankton blooms, constitute deleterious materials which impair designated beneficial uses.

30. Throughout the reach of the Middle Snake River, there are concentrations of macrophytes, algae, organic solids discharged from trout rearing facilities, and other suspended and submerged matter in concentrations causing nuisance and objectionable conditions which adversely affect designated beneficial uses.

31. The receiving waters of the Middle Snake River both as of April 19, 1991 and as of the date of this hearing contained excess nutrients resulting in visible slime growths and other nuisance aquatic growths that impair protected beneficial uses established for this reach of the river.

32. After consideration of all of the evidence, it is clear that the construction and operation of the Blind Canyon Fish Hatchery will cause significant violations of Idaho Water Quality Standards immediately downstream in the clean water zone and the large nutrient load added to the river will exacerbate and maintain existing water quality standard violations in the river.

33. In addition to Mr. Hardy's failure to sustain his burden of proof that additional nutrient loading will not cause an increase in plant growth and maintain or exacerbate existing water quality standard violations on the Middle Snake River, Mr. Hardy wholly failed to show that the Blind Canyon Fish Hatchery would not significantly impair cold water biota and salmonid habitat in the clean water zone at the mouth of Box Canyon Creek. The evidence was unrefuted that fish hatcheries decimate cold water biota habitat below points of discharge. That fact is particularly significant in this case since the cold water zone formed by Box Canyon Creek is one of the remaining refugia for important species of cold water biota in the Middle Snake River.

34. It must be concluded from consideration of all the evidence that Mr. Hardy's facility will violate Idaho Water Quality Standards. Violations will occur below the point of discharge into the clean water zone, and further nutrient loadings from the proposed hatchery will exacerbate existing plant growth conditions further downstream from the proposed facility.

35. It is a violation of Idaho Water Quality Standards for a point source discharge by itself or in combination with other sources to discharge pollutants in concentrations that will impair designated uses or fail to meet general or narrative criteria. See IDAPA §§ 16.01.02080 and 16.01.02400,01.a. The Department properly concluded that the Middle Snake River was overloaded with nutrients, sediments, and organic solids which have caused existing

Water Quality Standard violations and that the impact from additional nutrient and organic solid loading would only exacerbate and maintain existing problems.

36. Mr. Hardy has sought to characterize the Department's denial of §401 Certification in this case as the adoption and implementation of either a "no net increase" policy or rule or as a "moratorium" which in effect constituted a "rule" which was required to be promulgated under the Idaho Administrative Procedures Act. Mr. Hardy's contentions in this regard are not based upon any facts in the record and mistake the application of existing water quality standards to the requested §401 Certification as the adoption of some blanket rule of law in Idaho. The issue before the Department in April, 1991, and the issue before the Board in this contested case proceeding, is whether Mr. Hardy's construction and operation of the Blind Canyon Facility will comply with Idaho Water Quality Standards. In concluding that the facility will add additional nutrients thus exacerbating existing instream water quality violations, neither the Department nor the Board is doing anything other than engaging in administrative fact finding and application of existing law to facts as found. As of April, 1991, the Department rightfully had determined that instream water quality standards were being violated. This was true regardless of the sources to or components of the instream violations. This decision was based upon the fact that the Middle Snake River was overloaded with nutrients,

sediments and organic solids and that further loading into the river by Mr. Hardy would only exacerbate existing instream water quality violations. The Department's April, 1991 denial of §401 Certification to Mr. Hardy's Blind Canyon Facility was premised upon factual determination that the river had become overloaded with nutrients and organic solids and that as a result, the Department could not certify any further loading and resulting water quality degradation.

37. Neither the proceedings before the Department nor the proceedings before this Board in the contested case operate in any manner to deny or deprive Mr. Hardy of equal protection of the law.

38. In this contested case proceeding Mr. Hardy has received all procedural due process and substantive due process protections applicable to his application for an NPDES Permit in this case and as relate to §401 review by DEQ and by this Board.

39. Neither the Department's actions nor the Board's action in this contested case proceeding constitute arbitrary or capricious classifications or decisions.

40. Based upon the foregoing Findings of Fact, it must be concluded that §401 Certification cannot be issued by the State of Idaho in this case.

ORDER

Based upon the foregoing Findings of Fact and Conclusions of Law, §401 Certification of NPDES Permit Application No. ID-002693 must be, and hereby is, DENIED.

DATED this 8th day of January, 1993.

MALLEA & SCRIVNER

Kenneth L. Mallea
Kenneth L. Mallea
Hearing Officer