



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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Department of Water Resources
Eastern Region

444 Hospital Way #300 • Pocatello, Idaho 83201 • (208) 236-6160

Dirk Kempthorne, Governor
Toni Hardesty, Director

Wade Chapman, General Manager _____ January 31, 2005
Idaho Supreme Potatoes
PO Box 246
Firth, ID 83236

RE: WLAP #LA-000033 - Idaho Supreme Potatoes, Inc. Facility Inspection Report

Dear Mr. Chapman,

As you are aware, on December 3, 2004, the Idaho Department of Environmental Quality (DEQ) conducted an inspection of the wastewater-land application system in use by Idaho Supreme Potatoes, Inc. The inspection commenced at about 1:00 P.M. and was conducted by Michael Spomer, Discipline Lead, Environmental Resources, from the state office. He was met on-site by Mr. McKay Anderson of your staff who accompanied Mr. Spomer during the inspection.

Following is a summary of items that were noted or discussed during the inspection:

- 1) The facility applied a total of 214.8 MG of wastewater in 2003-2004 application year. The permit limit is based on crop water demand; there is no specific application rate.
- 2) In the summer of 2004, 7 new wells were installed to provide data to support the development of a new ground water monitoring plan. The regional office has assigned new monitoring well serial numbers. The 7 new groundwater monitoring wells have been sampled and the data submitted to the Department.
- 3) Ground water monitoring wells were locked and the area surrounding each well appeared to be properly maintained.
- 4) The facility is collecting the groundwater monitoring samples on a quarterly basis. Rocky Mountain Environmental Associates (RMEA) has collected ground water samples from the newly installed monitoring wells.
- 5) The facility indicated they were still having trouble with well #7 filling with sand and they needed to decide what to do with this well. Well #7 was locked during this year's inspection.

- 6) The facility acknowledged that in the summer of 2004 they had again used several of the groundwater monitoring wells to irrigate a small section of trees by Pivot #10. They indicated they were working with the Idaho Department of Water Resources (IDWR) to resolve this issue.
- 7) The facility did not present any data during the inspection, but did indicate they believed they potentially had exceedances for COD and Nitrogen loadings during 2004. They were still reviewing the data and would have the results available for the annual report submittal. They indicated they had not notified the regional office of the potential exceedances.
- 8) The facility revisited crop data from the 2002/2003 growing season (GS) and recalculated the Nitrogen uptake values corrected for a wet basis versus a dry basis. The numbers appear to show an increased uptake verses a declining uptake as previously reported. This revised calculation method will be used for the 2003-2004 GS data and included in the annual report. The facility indicated a separate letter addressing this issue had been sent to the regional office.
- 9) As a result of a Consent Order, the facility is planning to install individual flow meters on the all pivots in the spring of 2005. They did install individual magnetic flow meters on the irrigation water supply pump discharges in the spring of 2004.
- 10) There was one odor complaint received in 2004. The facility submitted a report to the regional office in June 2004. The facility suspected the problem came from a low spot on field #13 that allowed wastewater to accumulate. The low spot has been filled in with soil and reseeded.
- 11) The facility has had the domestic drinking wells sampled and will provide the data in the 2004 annual report.
- 12) In the spring of 2004, the facility submitted all required documents addressing their Compliance Activities.
- 13) The facility is planning to submit their permit reapplication in June 2005.

The inspection concluded at 3:30 P.M.

We want to express our appreciation for the cooperation and assistance demonstrated by your staff during the inspection and interview.

Regarding the ongoing use of facility monitoring wells for tree irrigation, the Department has serious concerns regarding the potential for aquifer cross-contamination as well as for rendering ground water sample results invalid or unreliable.

While the Idaho DEQ is not responsible for administering IDAPA 37.03.09, "Well Construction Standards Rules", it should be noted that Rule Subsection 10. Construction of Cold Water Wells, paragraph 10 states:

Monitoring Wells All monitoring wells shall be constructed and maintained in a manner that will prevent waste or contamination and as otherwise required by these rules. When a monitoring well is no longer useful or needed, the owner or operator of the well shall abandon the well in accordance with Rule Subsection 025.12. (7-1-93)

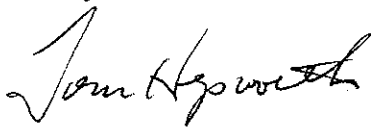
The Department submits that this dual use is not consistent with either objectives or standard operating procedures relative to the use of ground water monitoring wells.

Therefore, the Department is requesting a follow-up letter describing the status of discussions with the Idaho Department of Water Resources and outlining potential remedies under consideration. If it is determined by IDWR that the proposed dual use is not inconsistent with their rules, your response to DEQ should include a detailed explanation of how aquifer cross-contamination and impacts to sample results will be prevented. Your response should include detail drawings describing irrigation water withdrawal equipment and how it is connected to the monitoring well as well as information on devices or procedures used to protect against foreign matter entering the monitoring well casing.

If DEQ determines that this dual use presents unacceptable risks in terms of aquifer contamination or sample quality degradation, it may be necessary to require the installation of single use, dedicated monitoring wells to replace those used for irrigation purposes. We would appreciate receiving your written response on this issue by February 28, 2005.

If you have any questions or comments, please contact me at 236-6160 or thepwort@deq.idaho.gov

Sincerely,



Tom Hepworth
Senior Water Quality Analyst

Attachment: WLAP #LA-000033; Facility Inspection Report

CC. Rick Huddleston, Wastewater Program Manager, State Office
Mike Spomer, Enforcement Support, State Office

Mr. Wade Chapman
January 31, 2005
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McKay Anderson, Idaho Supreme Potatoes, Inc.
Roger Warner, Idaho Department of Water Resources, Idaho Falls Office

Route: John Kirkpatrick, Engineering Manager, Pocatello Regional Office

File: WLAP file: Bingham County, #LA-000033, Correspondence 2005

Wastewater Land Application Program
Facility Inspection for Idaho Supreme Potatoes, Inc.
Permit Number #LA-000033

Wastewater-Land Application
Facility Inspection & Site Review Form
Department of Environmental Quality
Pocatello Regional Office



DATE: 12/03/04

PERMIT #: LA-000033-02

PERMITTEE NAME:

Idaho Supreme Potato, Inc.
614 E. 800 N
P.O. Box 246
Firth, Idaho 83236

CONTACT (NAME):

Mr. McKay Anderson

TIME ENTERED SITE: 1:00 P.M.

TIME EXIT SITE: 3:30 P.M.

PHONE: 1-208- 346-6841

DATE OF LAST INSPECTION: September 30, 2003

INSPECTION:

Announced ☒ Unannounced ☐

DEQ Staff Present:

Michael Spomer, Technical Service

Original signed by Michael Spomer and on file in the Pocatello Regional Office

Signature of Inspector Date (December 28, 2004)

REGIONAL OFFICE:

Pocatello Regional Office

IS SITE MAP ATTACHED? Yes

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Permit Number #LA-000033

STATUS OF PERMIT: Active

PERMIT ISSUANCE DATE: May 4, 2000

PERMIT EXPIRATION DATE: May 4, 2005

WASTEWATER LAND APPLICATION PERMIT QUESTIONNAIRE

1. Confirm that all Facility information is still correct. (i.e. schedule B of permits)

- *Facility contact person is McKay Anderson.*

2. What is type of wastewater being applied?

- *Potato processing wastewater*

3. Are the latest characteristics of the wastewater still as described in the application?

- *Due to improved water management efforts, the plant has reduced water flows from an average 1,200,000 gals/day to 750,000 gals/day. This level continued in 2004. The constituent concentrations have gone up but the total loadings are about the same to the land application areas.*

4. What is the mode of irrigation at this facility?

- *Center pivots on all fields with spray headers.*

5. What is area of wastewater application? (Breakdown by fields or lots and attach a site map).

- *See reference map for field's layout in current permit. All 13 permitted fields are being used. Acreage is approximately 322 irrigated acres.*

6. Are non-permitted sites utilized for land application?

- *No, all areas that receive wastewater are included in the permit.*

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7. Non-Growing Season (NGS) application allowed? If so, were application rates within permitting limits.

- *Yes, Wastewater is applied in the NGS. Specific data not reviewed during inspection.*

8. Were growing season (GS) application rates within permit limits?

- *Specific data not reviewed during inspection, data will be provided in Annual Report submittal.*

9. What was total amount of wastewater land applied for the year? Is this amount within permit limits?

- *The facility applied a total of 214.8 MG of waste water in 2003-2004 application year.*

10. Is there evidence of discharge to surface water or runoff from the permitted site?

- *No, a tour of all fields did not show any problems.*

11. Does the land application site show evidence of hydraulic overloading?

- *No, a tour of all fields did not show any problems.*
- *The hot summer weather did have some impact on crop growth, but there were no signs of the fields being impacted from the wastewater applications. The facility indicated they increased the use of irrigation water.*
- *The facility was actively applying wastewater to pivot #5.*

12. Does the facility graze animals? If so, does the facility have a DEQ approved grazing management plan?

- *No.*

13. Is there evidence to show compaction by grazing animals of the land application site? How many animals are grazed and when?

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▪ *Does not apply*

14. Has ground water quality been effected by the land application practice?

▪ *Did not review specific groundwater data during inspection. They installed 7 new groundwater monitoring wells in the summer of 2004 and have collected some data which they have submitted to the agency and will be using these new wells to support the groundwater monitoring plan in the reapplication.*

15. Are pretreatment performance measures being met for TSS and BOD? (for municipal facilities only)

▪ *N/A*

16. Is COD loading rate within permitting limits? (50 lbs./ac/day seasonal loading rate)

▪ *The facility did not present any data during the inspection, but did indicate they potentially had exceedances for COD during 2004. They were still reviewing the data and would have the results available for the annual report submittal. They indicated they had not notified the regional office of the potential exceedances.*

17. Is loading rate for Nitrogen within permit limits? (150% of typical crop uptake)

▪ *The facility indicated they may have had exceedances for Nitrogen. See comments on COD question #16.*
▪ *The facility had revisited the 2002/2003 GS crop data and recalculated the Nitrogen uptake values corrected for a wet basis verses a dry basis and the recalculated numbers appear to show an increased uptake verses a declining uptake. This revised calculation method will be used for the 2003-2004 GS data and included in the annual report. A separate letter addressing this issue was sent to the regional office.*

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18. Is loading rate for Phosphorus within permit limits?

- *Not included in current permit.*

19. Loading rate for TDS (or NVDS/TDIS)?

- *Not included in current permit.*

20. Have construction plans been submitted to DEQ for new WLAP facilities?

- *There were no active construction plans under consideration at the time of the inspection.*

21. Is the Wastewater treatment system being operated under the supervision of a certified operator? What level of certification does the operator possess?

- *No, the operators are not certified. Training is basically 'on-the-job' for the operations of the plant equipment and process.*

22. Does it appear that there are adequate personnel currently employed to manage the land application operation?

- *Yes, the staffing appears adequate.*
- *They currently have 3 plant operators, 2 field operators, and 1 Lab Tech.*

Name	Title	Responsibility	Percent Time
McKay Anderson	Environmental Tech	Technical oversight	100%
Charlie Chapman	Waste App Supervisor	Oversees land app area	100%

23. Is sludge or solid waste being applied or managed in accordance with the approved sludge or solid waste management plan(s)?

- *Yes, edible solids are sent out as cattle feed. The rocks and heavy solids that are removed in the process*

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are placed on one field and the fines or silt is placed on another section of the field. The fine soil after degrading is reused as soil fill when possible.

24. Are primary waste treatment facilities in good repair?

- *Overall everything appeared to be in good repair. The main discharge pipe inside the plant area that was leaking during the 2003 inspection has been replaced with a stainless steel pipe. During the 2004 September plant outage, they cleaned out the clarifier and fixed the rake sweeps and applied a new interior lining to the steel walls.*

25. Are treatment and storage lagoons maintained and operational?

- *Facility does not use storage or treatment lagoons.*

26. Are water/wastewater conveyance structures maintained and operational?

- *Yes, the main wastewater line to the application fields is a relative new HDPE pipeline. All other piping and valves boxes appeared to be properly maintained. The facility is planning to install individual flow meters on the pivots in the spring of 2005. This is a result of a Consent Order condition. They installed individual magnetic flow meters on the irrigation water supply pump discharges in the spring of 2004.*

27. Are irrigation and other equipment winterized? (for systems that operate in the NGS)

- *System operates in the winter.*

28. Is there even distribution of water/wastewater during winter applications?

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- Although the inspection was done in early December, the weather was fairly mild and therefore not able to determine how facility operates in extreme cold weather.
29. Are crops being harvested from the land application fields? If so, what types of crops are grown? What are the typical crop yields?
- Grass is grown and harvested. They have tried other crops, but have not produced good crop yields. They indicated that yields were improved over 2003. They have collected crop tissue data and it will be included in the 2004 annual report.
30. Are the land application buffer zone requirements being adhered too? Wellhead distances, public accesses, and inhabited dwellings?
- Yes, a complete tour of the perimeter roads was taken and all buffer zones were acceptable.
31. Have there been any odor complaints at the facility within the past year? If so, what was the cause? How was the complaint resolved?
- There was one odor complaint received in 2004. The facility submitted a report to the regional office in June 2004. The facility suspected the problem came from a low spot on field #13 that allowed wastewater to accumulate and go bad. The low spot has been filled in with soil and reseeded.
32. Has an Odor management plan been submitted to the DEQ? Is the wastewater treatment plant and land application being operated so as not to create a public health hazard or nuisance condition including odors?
- Odor management plan has been submitted to agency and is currently under review. The facility adds Bioxide to the clarifier overflow on a limited basis. This has been effective in helping to control odors. The facility has

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pigged the discharge line on occasion. The facility improved the slope of the concrete floor in the clarifier overflow collection pit to eliminate solids buildup. This has helped to reduce odor issues within the plant area.

33. Have proper fencing and signage been installed around the Wastewater treatment plant and the land application site?

- *All gates to application area were locked and had "no trespassing" signs.*

34. Does the Operating and Maintenance Manual address proper sample collection methods, analytical methods and QA/QC procedures?

- *The O & M Plan is currently under review by agency and was not reviewed during the inspection.*

35. Is the facility sampling and monitoring according to the permit?

- *Yes, they are doing their required monthly sampling of the wastewater as well as daily sampling for their operating control monitoring.*
- *The facility is collecting the groundwater monitoring samples on a quarterly basis. Rocky Mountain Environmental Associates (RMEA) is collecting the ground water samples from the newly installed monitoring wells.*
- *The facility has had the domestic drinking wells sampled and will be providing this data in the 2004 annual report submittal.*

36. Is the sampling equipment operative?

- *The plant takes manual grab samples for wastewater sampling.*

37. Have the soils sample composites been collected according to permit conditions? Who conducts soil sampling?

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- *Yes, they use Western Farm Services and have collected the required samples in 2004. This data will be in the annual report submittal.*

38. Have the wastewater sample composites been collected according to permit conditions? Who conducts wastewater sampling?

- *Yes, the operators collect the samples and they use the Hach testing methods in a small lab on site to test daily samples for operational control. They use Analytical Laboratories for the monthly testing required by the permit.*

39. Have the plant tissue samples been collected according to permit conditions? Who conducts plant tissue sampling?

- *Yes, the samples have been collected and are tested by an off site lab.*

40. Have the lysimeter samples been collected according to permit conditions? Who conducts lysimeter sampling?

- *No lysimeters are in use.*

41. Who performs the chemical analytical work required by the permit?

- *They have an on site lab that uses the Hach test methods for most tests. They are using the approved methods and do compare to standards to check calibration of test equipment.*
- *They send in monthly wastewater samples to Analytical Labs for the analysis required by the permit.*

42. Have the ground water monitoring wells been sampled according to permit conditions (purge of 3 well casing volumes or stabilized water quality (pH, conductivity) prior to obtaining the sample? Who conducts the ground water sampling?

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- *Sampling procedures were discussed with facility staff, and the sampler (McKay Anderson) knew what was required. They have calculated the purge rates to get at least 3 volumes and do wait till pH, conductivity and temperature have stabilized before collecting sample. They have the sample bottles shipped in from Analytical Labs. After collection, the samples are sent back to Analytical Labs for testing.*

43. Does monitoring data indicate exceedance of any water quality parameters? If so, what parameters.

- *I did not review any groundwater data during the inspection. This information will be available in the annual report.*

44. Do monitoring wells appear to be in good condition (from visual inspection)? How many monitoring wells are employed?

- *In the summer of 2004, the facility installed 7 new groundwater monitoring wells to provide the necessary data to support the development of a new ground water monitoring plan. The regional office has assigned new monitoring well serial numbers.*
- *All of the wells had locked caps and the area surrounding each well was properly maintained.*
- *The facility indicated they were still having trouble with Well #7 filling with sand. They were deciding what to do with this well.*
- *The facility did acknowledge that in the summer of 2004 they had again used several of the groundwater monitoring wells to irrigate a small section of trees by Pivot #10. They indicated they were working with IDWR to resolve this issue. It was again pointed out to the facility, the use of the groundwater monitoring well for irrigation purposes was not an acceptable practice.*

45. Have all monitor parameters (flow rates, analytical tests etc) been collected and recorded at the required frequencies?

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- *Yes, plant operating data appears to have been collected and analyzed as required.*

46. What flow metering or other measuring devices are used? What do the devices measure? When was the equipment last calibrated?

- *The main line from the plant to the fields has a magnetic flow meter on it. It was last calibrated during September 2004 plant outage. It was found to be within calibration limits.*
- *New magnetic flow meters were installed on the supplemental irrigation lines in the spring of 2004.*

47. Has the Permittee met the required Compliance Activity Completion Dates as listed in the permit? List each Compliance Activity and current status.

- *In the spring of 2004, the facility submitted all required documents listed in the Compliance Activity section of the permit.*
- *The facility will be submitting the permit reapplication in June 2005 and will incorporate any Compliance Activity issues in the reapplication.*
- *The facility will be incorporating the new monitoring well data in the reapplication as well.*

48. Have annual reports been submitted to the DEQ in the required timeframe and with the required information? Who prepared them?

- *Yes, and they are aware of the January 31 submittal deadline. McKay Anderson will be preparing the final report.*

49. Did the Permittee comply with all Standard Permit Conditions for Procedures and Reporting? Note any exceptions. (Schedule H)

- *Yes*

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50. Did the Permittee comply with all Standard Permit Conditions for Modifications, Violations, and Revocations? Note any exceptions. (Schedule I)

▪ Yes

51. Did the Permittee provide access to DEQ personnel according to permit conditions?

▪ Yes