



OFFICE OF INSPECTOR GENERAL

Catalyst for Improving the Environment

Evaluation Report

Review of EPA's Response to Petition Seeking Withdrawal of Authorization for Idaho's Hazardous Waste Program

Report No. 2004-P-00006

February 5, 2004

Report Contributors: Carolyn Copper
Michael Owen
Phil Weihrouch
Madeline Mullen

Abbreviations

CFR	Code of Federal Regulations
DOE	Department of Energy
EPA	Environmental Protection Agency
HLLWE	High Level Liquid Waste Evaporator
IDEQ	Idaho Department of Environmental Quality
INEEL	Idaho National Environmental and Engineering Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
ILWMS	INTEC Liquid Waste Management System
LET&D	Liquid Effluent Treatment and Disposal
MACT	Maximum Achievable Control Technology Standards
MOA	Memorandum of Agreement
NOD	Notice of Deficiency
NOV	Notice of Violation
OIG	EPA Office of Inspector General
PEWE	Process Equipment Waste Evaporator
ppm	Parts Per Million
RCRA	Resource Conservation and Recovery Act
WINCO	Westinghouse Idaho Nuclear Company



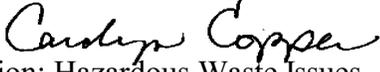
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
INSPECTOR GENERAL

February 5, 2004

MEMORANDUM

SUBJECT: Evaluation Report:
Review of EPA's Response to Petition Seeking Withdrawal of Authorization for
Idaho's Hazardous Waste Program
Report No. 2004-P-00006

FROM: Carolyn Copper 
Director for Program Evaluation: Hazardous Waste Issues
Office of Program Evaluation

TO: John Iani
Regional Administrator
EPA Region 10

Attached is our final report on the Environmental Protection Agency's (EPA's) response to the petition seeking withdrawal of authorization for Idaho's Hazardous Waste Program. This petition was submitted to Region 10 on September 13, 2001, by Keep Yellowstone Nuclear Free, the Environmental Defense Institute, and David B. McCoy (the petitioners). The purpose of our review was to determine whether EPA Region 10's (Region's) response to the September 2001 petition addressed the issues and was supported by documentation.

The report contains findings and recommendations that describe problems the Office of Inspector General (OIG) has identified and the corrective actions the OIG recommends. This report represents the opinion of the OIG and the findings contained in this report do not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA managers in accordance with established audit resolution procedures.

On October 24, 2003, the OIG issued a draft report to the Region for review and comment. We received the Region's and the Idaho Department of Environmental Quality's (IDEQ's) responses to the draft report on November 24, 2003. The Region and the OIG discussed the draft report recommendations on December 11, 2003. During the meeting, we agreed to revise Recommendation 1, and the Region agreed to revise its response for Recommendations 3 and 4. The Region submitted a revised response to the draft report recommendations on January 27, 2004. The Region concurred with the report's recommendations.

ACTION REQUIRED

In accordance with EPA Manual 2750, you, as the primary action official, are required to provide this office with a written response within 90 days of the final report date. The response should address all recommendations. For corrective actions planned but not completed by the response date, please describe the actions that are ongoing and provide a timetable for completion. Reference to specific milestones for these actions will assist in deciding whether to close this report in the assignment tracking system.

We have no objection to the further release of this report to the public. Should you or your staff have any questions, please call me at (202) 566-0829, or Michael Owen, Assignment Manager, at (206) 553-2542.

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Purpose of Review

On September 13, 2001, Keep Yellowstone Nuclear Free, the Environmental Defense Institute, and David B. McCoy submitted a petition to Region 10 to withdraw the IDEQ as the Resource Conservation and Recovery Act (RCRA) authority for the State of Idaho.¹ The petition alleged that IDEQ had failed to administer environmental laws at Department of Energy's (DOE's) Idaho National Environmental and Engineering Laboratory (INEEL). Prior to the petition, the petitioners submitted requests to the EPA and DOE Inspectors General to investigate allegations of DOE's failure to comply with environmental laws at INEEL. The allegations discussed in these earlier submissions were incorporated into the September 2001 petition to EPA. Because the allegations discussed in the petition represent serious environmental compliance issues, the OIG agreed to conduct a review. Specifically, the purpose of this review was to determine whether Region 10's response to the September 2001 petition addressed the issues and was supported by documentation.

The major allegations discussed in the September 13, 2001, petition are summarized in Appendix A.

Background

RCRA was enacted by Congress in 1976 as an amendment to the Solid Waste Disposal Act of 1965. RCRA's goals are to protect human health and the environment by ensuring that hazardous wastes are managed in an environmentally safe manner, to reduce or eliminate the generation of hazardous wastes, and to conserve energy and natural resources. Subtitle C of RCRA establishes the program for the management of hazardous wastes from the point of origin to the point of final disposal. Subtitle C sets technical standards for the design and safe operation of hazardous waste treatment, storage, and disposal facilities. RCRA authorizes States, after obtaining approval from EPA, to develop and enforce their own hazardous waste programs in place of the Federal program.

EPA authorized IDEQ's Hazardous Waste Program in April 1990. The Memorandum of Agreement (MOA) between the State of Idaho and the Region establishes the policies, responsibilities, and procedures for administration of the State's hazardous waste program. The MOA also defines the manner in which IDEQ and Region 10 will coordinate in the administration and enforcement of the State's program.

INEEL was established by the Federal Government in 1949 and covers 893 square miles in southeastern Idaho. Its original purpose was to provide an isolated location where prototype nuclear reactors could be designed, built, and tested. INEEL's current mission is research, hazardous and radioactive waste management, environmental cleanup, and environmental

¹Petition to United States Environmental Protection Agency ("EPA") to Commence Proceedings for Withdrawal of the Idaho Department of Environmental Quality ("IDEQ") as the Resource Conservation and Recovery Act ("RCRA") Authority for the State of Idaho (40 CFR §§ 271.22 and 271.23).

technology development. According to the February 2003 revision to the Part A permit application for INEEL, the facility has 48 RCRA regulated units.²

Keep Yellowstone Nuclear Free, the Environmental Defense Institute, and David B. McCoy submitted requests to the EPA and DOE Inspectors General on August 8, 2000 and September 18, 2000, to evaluate allegations of DOE's failure to comply with environmental laws at INEEL. Additional information on alleged violations of environmental laws at INEEL was submitted by the petitioners to the EPA OIG on February 5, 2001. The petitioners' allegations in these submissions were incorporated into the September 13, 2001 petition to EPA for withdrawal of Idaho's authority to administer RCRA.

In response to the petitioners' request that the EPA OIG evaluate the administration of environmental laws and regulations at INEEL, the OIG requested that Region 10 provide EPA's position on each allegation discussed in the September 13, 2001 petition. The Region's March 20, 2002, response disclosed that it had conducted an informal evaluation of the allegations in accordance with 40 Code of Federal Regulations (CFR) Part 271 and concluded that sufficient cause did not exist to commence withdrawal proceedings of the State's Hazardous Waste Program authorization. The response stated that the Region found that the State of Idaho had met its authorized program authorities to issue permits, enforce hazardous waste regulations, and provide public participation; and had complied with the MOA for the State's authorized Hazardous Waste Program.

On April 2, 2002, the petitioners issued a rebuttal to the Region which questioned some of the facts cited in the response to the petition. The Region issued a second response on July 2002 which provided answers to the questions posed in the petitioners' rebuttal.

Scope and Methodology

To accomplish our objective, we:

- Compared Region 10's responses to the allegations made by the petitioners and documentation provided to support their responses to determine whether all issues were addressed;
- Where needed, submitted clarification questions to Region 10 and evaluated their responses to followup questions to determine whether the allegations had been addressed by the Region; and
- Performed limited field work at IDEQ for three judgmentally selected INEEL RCRA waste units discussed in the petition to evaluate the permitting, enforcement, and public participation process covering the period April 1990 through July 2003.

²The number of units identified on the Part A for INEEL differs from that shown in RCRAInfo, EPA's comprehensive information database on the regulated universe of hazardous waste handlers. Individual units may be grouped together for permitting.

The evaluation scope covered allegations discussed in the September 13, 2001, petition to Region 10 requesting withdrawal of EPA's authorization of IDEQ's Hazardous Waste Program. There has been numerous correspondence submitted by the petitioners covering many issues at INEEL. Our evaluation included a review of IDEQ's Hazardous Waste Program records and other evaluation procedures we considered necessary for purposes of expressing an opinion on our objective.

The three INEEL units selected for field work were the:

- New Waste Calcining Facility Calciner (Calciner), a treatment facility used to convert liquid radioactive waste into a dry substance.
- Process Equipment Waste Evaporator (PEWE), which was used to concentrate and reduce liquid radioactive wastes prior to storage or further processing.
- High Level Liquid Waste Evaporator (HLLWE), which was also used to concentrate and reduce liquid radioactive wastes prior to storage or further processing.

This evaluation was performed in accordance with the *Government Auditing Standards* issued by the Comptroller General of the United States. Appendix B provides further details on INEEL and the units reviewed. Appendix C provides additional details on the scope and methodology.

Evaluation Results

We found that the Region supported its positions on most of the allegations with appropriate RCRA criteria and documentation. However, we found several areas of concerns, resulting in there being less assurance that hazardous waste is managed in an environmentally safe manner in accordance with RCRA. Specifically, we found:

- A date for submitting information to correct deficiencies in the Part B application for the Calciner was not established until 1997 even though permit deficiencies were identified in 1991 and a date is required by 40 CFR Part 124. Although we found weaknesses in the permitting process, no followup action is required by the Region for the Calciner because the unit is currently undergoing closure. However, our finding supports concerns raised by the petitioners related to IDEQ's failure to exercise control in requiring permits.
- A date for submitting information to address unresolved Part B permit application deficiencies for the HLLWE was not established as required by EPA regulation. Further, followup actions to obtain a complete permit application for the HLLWE were not taken until almost 8 years after a notice of deficiency (NOD) was issued to DOE. Since the permit deficiencies for the HLLWE have not been resolved, the Region needs to ensure that IDEQ requires DOE to expeditiously correct these deficiencies.
- Data has not been collected to determine whether the PEWE and associated tank systems are in compliance with RCRA emissions standards. The Region needs to ensure that IDEQ

inspections include evaluations of the PEWE and its associated tanks to determine compliance with RCRA emissions requirements.

- Although compliance inspections at INEEL generally have been conducted annually since 1989, compliance with RCRA waste characterization requirements was not assessed for the INTEC Liquid Waste Management System (ILWMS) until July 2001. The Region needs to ensure that IDEQ inspections include evaluations of the ILWMS to determine compliance with waste characterization requirements.

IDEQ officials stated that more emphasis was not placed on resolving permit deficiencies for the Calciner and HLLWE because priority was placed on permitting other INEEL facilities. Further, we found that IDEQ had incomplete emissions data and waste characterization information because inspections of the PEWE and ILWMS did not cover all major RCRA requirements. According to the IDEQ officials, the large number and complexity of RCRA units at INEEL required that IDEQ prioritize its permitting activities for the facility and limit the scope of RCRA requirements evaluated during inspections.

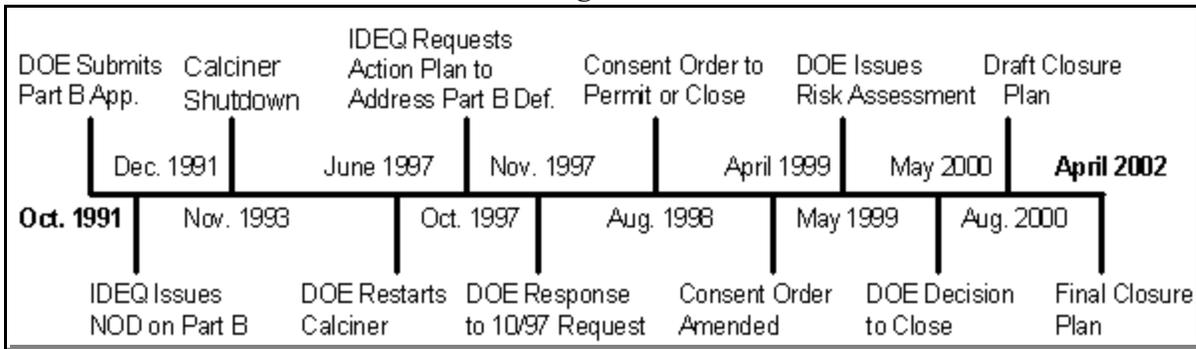
Because our evaluation of IDEQ's Hazardous Waste Program activities was limited to three units at INEEL, and INEEL represents only 1 of 10 RCRA facilities within the State of Idaho, we cannot conclude that these weaknesses represent program-wide material deficiencies. The following sections of this report discuss our findings in more detail.

Date to Resolve Calciner Permit Deficiencies Not Established in a Timely Manner

The petition alleged that IDEQ granted DOE years to comply with requirements for Part A and B applications for the Calciner which DOE failed to accomplish. The Region's response stated that consent orders required DOE to either permit or commence closure of the Calciner by June 2000 and to gather data to assist in a permitting decision, including emissions testing, a risk assessment, and an integrity assessment of the tanks. The Region's response also stated that there were technical challenges posed in collecting the emissions data required for the permit decision. In addition, the Region stated that DOE ceased operations of the unit and submitted a closure plan in August 2000, consistent with the consent order.

Although the Region's response indicated that appropriate actions were taken on the permit application, we found that a date for submitting information to correct deficiencies in the Part B application for the Calciner was not established until 1997 even though permit deficiencies were identified in 1991 and a date is required by 40 CFR Part 124. Figure 1 presents a timeline of activities related to permitting of the Calciner.

Figure 1



October 1991:

DOE submits the RCRA Part B application for the Calciner on October 1, 1991. DOE's transmittal letter for the permit application discloses that the application is incomplete because several permit issues require resolution. These unresolved issues include:

- Some EPA methods for sampling and analysis are not useable due to the design of tanks and sampling systems and high radiation levels of waste solutions.
- Waste stream characterization data is too limited.
- Radionuclide and Nitrous Oxide off-gas emissions monitoring is deficient because monitoring is not conducted at emissions points.
- No risk assessment was completed because data regarding the contribution of all hazardous constituents to the emissions is needed.
- No operating standards for the miscellaneous unit have been established.

December 1991:

DOE submits to IDEQ a schedule for providing the information missing from application in order to address the application deficiencies on December 24, 1991. The schedule discloses that the missing information will be submitted to IDEQ over the 5-year period ending December 31, 1996.

IDEQ issues a NOD to DOE addressing concerns with the permit application and corrective action schedule on December 31, 1991. The NOD informs DOE that the permit application is incomplete because of the deficiencies discussed in the application's transmittal letter. In addition, the NOD states that IDEQ has several questions and concerns

with the corrective action schedule and DOE will be contacted in the immediate future to work out details for resolving the deficiencies. However, the NOD does not specify a date for submitting information to address the deficiencies as required under 40 CFR Part 124. Part 124 requires that a NOD on a permit application specify the information necessary to make the application complete and a date for submitting the necessary information.

- November 1993:** The deficiencies are not resolved as of November 1993 when DOE temporarily stops operating the Calciner and places it in “standby mode.” DOE reported that the Calciner processed about 753,000 gallons of liquid waste during the period from December 1990 through November 1993.
- June 1997:** DOE restarts the Calciner, 43 months after placing the unit in temporary standby mode. Despite the restart of operations, IDEQ does not require DOE to establish a specific schedule for resolving the permit deficiencies.
- October 1997:** Six years after the deficiencies were identified, IDEQ issues a followup letter to DOE requesting identification of the application deficiencies that have been resolved, as well as an action plan for resolution of the remaining deficiencies. The letter also requests a schedule for resolving the remaining deficiencies and establishes a due date of November 7, 1997, for providing IDEQ with the information.
- November 1997:** IDEQ’s actions to resolve the permit deficiencies show significant improvement. On November 10, 1997, DOE submits a draft response to IDEQ’s October 1997 request. During the period from November 1997 to August 1998, IDEQ pursues resolution of the deficiencies through followup letters and meetings with DOE. These followup activities ultimately result in a consent order that establishes a specific schedule for permitting the unit or submitting a closure plan.
- August 1998:** The consent order requirements become effective in August 1998 and establish a due date of April 30, 1999, for permitting or placing the unit in standby mode. The consent order also specifies that the unit cannot be restarted without a permit after April 30, 1999, and requires DOE to make a decision on permitting or closing the unit by June 1, 2000.
- April 1999:** IDEQ extends the due date for permitting or placing the unit in standby from April 30, 1999, to June 1, 2000, through an amendment to the consent order. The date is extended primarily to provide DOE time to implement a project to sample the unit’s off-gas emissions to support DOE’s decision whether to attempt to meet the performance standards of EPA’s pending Maximum Achievable Control Technology (MACT) Standards which were promulgated in September 1999.

- May 1999:** In response to the consent order, DOE issues a final screening level risk assessment for the Calciner in May 1999 and an emissions inventory testing report in February 2001. These reports conclude that the unit's emissions would result in maximum offsite and onsite health and ecological impacts that do not exceed EPA standards. However, DOE's off-gas emissions sampling project identifies that the unit's off-gas emissions exceed the MACT standards for mercury and unburned hydrocarbons.
- May 2000:** DOE makes a decision to close the Calciner and stops operating the unit.
- August 2000:** DOE submits the draft closure plan to IDEQ.
- April 2002:** DOE submits the final closure plan to IDEQ.

We found that a date for submitting information to address the permit application deficiencies was not established by IDEQ until October 1997, which was 6 years after the deficiencies were identified. IDEQ may have been able to make a more timely permitting decision for the Calciner if a date for submitting information to correct the permit application deficiencies had been included in the December 1991 NOD. Timely permitting decisions are important because a RCRA Permit provides the legal authority to treat, store, or dispose of hazardous waste and establishes facility-specific requirements and conditions which must be met in order to comply with RCRA. Furthermore, compliance with the permit ensures that hazardous waste is handled in a controlled manner that is protective of human health and the environment.

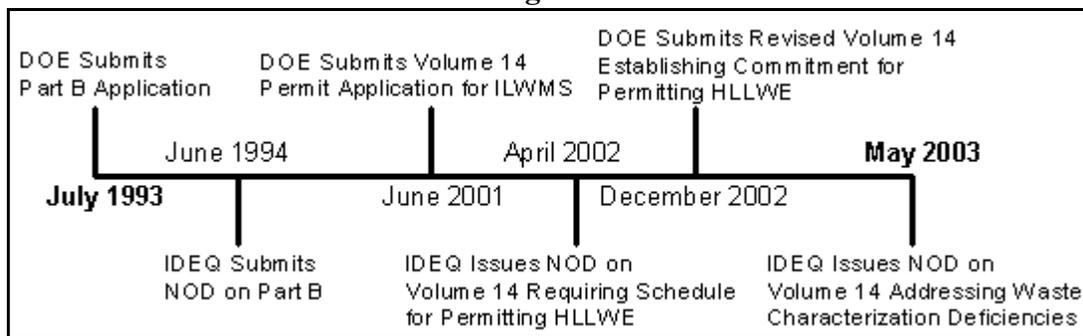
IDEQ officials told us that more emphasis was not placed on resolving permit deficiencies for the Calciner because priority was placed on permitting other INEEL facilities. According to the officials, DOE had informed IDEQ that it might not operate the Calciner in the future and, as a result, IDEQ doubted that the unit would be restarted. The officials also said that the large number and complexity of RCRA units at INEEL required that IDEQ prioritize its permitting activities for the facility. Consequently, priority was placed on permitting other significant INEEL units such as the Radioactive Waste Management Facility and the Sodium Processing Plant. Since we did not include these units in our review, we were unable to determine whether IDEQ correctly prioritized its permitting activities for INEEL.

Date to Resolve Permit Deficiencies for the HLLWE Not Established

The petition alleged that a permit application has not been filed for the HLLWE and the unit is not included in the June 2001 Part B application. The Region's response stated that the HLLWE was included in the 1990 Part A application as a larger capacity replacement unit under 40 CFR Part 270. The Region explained in the response that the regulation authorizes IDEQ to grant interim status to new units which increase the capacity of a process already in operation at a facility. The response also stated that IDEQ was drafting a schedule to require DOE to include the HLLWE as a Class 3 permit modification.

Although we acknowledge the Region’s judgment that the HLLWE qualified for interim status, our review found that IDEQ’s NOD on the permit application did not establish a date for submitting information to address unresolved Part B permit application deficiencies for the unit as required by 40 CFR Part 124. Further, followup actions to obtain a complete permit application for the HLLWE were not taken until almost 8 years after this NOD was issued to DOE. Figure 2 presents a timeline of permitting activities for the HLLWE.

Figure 2



July 1993: A Part B permit application for the HLLWE³ and several other RCRA units at INEEL is submitted to IDEQ on July 21, 1993.

June 1994: IDEQ determines that the Part B application is incomplete and issues a NOD to DOE on June 30, 1994. The NOD includes deficiencies for the HLLWE in the areas of waste characterization and sampling methods. As a result, the NOD requests that DOE provide IDEQ additional information on the unit, including:

- Chemical and physical analyses used to characterize wastes prior to treatment.
- Test methods used to test for hazardous waste constituents listed in Part A of the RCRA permit application.
- Sampling methods and their consistency with EPA or equivalent IDEQ approved methods.

However, IDEQ does not establish or require a date for submitting information to correct the deficiencies even though the NOD identifies the deficiencies as “substantial issues.” As discussed previously, 40 CFR Part 124 requires that a NOD on a permit application specify the information

³The HLLWE is referred to as the New Waste Calcining Facility Evaporator Tank System in the permit application.

necessary to make the application complete and a date for submitting the necessary information.

June 2001: Volume 14 permit application for the ILWMS is submitted by DOE. The waste characterization issues requiring resolution by the June 1994 NOD are partially corrected through this permit application for the ILWMS. However, some issues remain unresolved, and this permit application does not include the HLLWE.

April 2002: Almost 8 years after the 1994 NOD, IDEQ issues a NOD on the Volume 14 Partial Permit Application which includes a requirement for DOE to draft a “schedule of compliance” for permitting the HLLWE.

December 2002: DOE submits a revised Volume 14 permit application. The revised permit application establishes a commitment by DOE to add the HLLWE to the Volume 14 permit application within 180 days of the effective date of permitting the units currently included in the application.

May 2003: IDEQ issues a second NOD on the Volume 14 partial permit application which includes a requirement for DOE to provide additional information to address waste characterization deficiencies for the ILWMS within 90 days. Resolution of these issues for the ILWMS should also correct the unresolved deficiencies discussed in the June 1994 NOD.

IDEQ did not initiate followup actions which addressed the unresolved permitting issues for the HLLWE until April 2002. The April 2002 NOD resulted in a commitment by DOE to submit a new permit application for the HLLWE within a specific time period. Furthermore, the remaining unresolved waste characterization issues for the HLLWE should be resolved by IDEQ’s May 2003 NOD. Because the 90-day deadline for submitting the information specified by the May 2003 NOD ended after we completed our field work at IDEQ, we were unable to verify whether the waste characterization issues have been resolved. However, IDEQ officials told us they did not anticipate any barriers to resolving the Part B application deficiencies and issuing the permit for the HLLWE.

Although IDEQ identified in 1994 that it did not have sufficient waste characterization information to make a permit decision for the HLLWE, these issues had not been resolved as of July 2003. IDEQ officials said more emphasis was not placed on resolving permit deficiencies for the HLLWE because priority was placed on permitting other INEEL facilities. As discussed previously, timely permitting decisions are necessary for ensuring hazardous waste is handled in a controlled manner that is protective of human health and the environment.

Air Emission Data Not Collected for PEWE

The petition alleged that IDEQ failed to enforce emission requirements of 40 CFR Part 265 Subpart AA for the PEWE. The Region’s response said that it is clear that DOE believes the

PEWE is subject to the air emissions standards from information provided in the RCRA Part B application for the INEEL facility. The Region also stated in the response that there is no information to suggest that the PEWE is out of compliance with the air emissions standards.

Although the Region found no evidence that the PEWE was out of compliance with standards, our review found that IDEQ has not collected data to determine whether the unit and its associated tank systems are in compliance with 40 CFR Part 265 Subpart AA air emissions requirements. The PEWE and its associated tank systems include process vents and air stripping operations for hazardous wastes containing organic concentrations which exceed 10 parts per million (ppm). Under Subpart AA, the owner or operator of a facility with process vents associated with distillation, fractionation, thin-film evaporation, or steam stripping operations managing hazardous wastes with organic concentrations of at least 10 ppm is required to either: (1) reduce total organic emissions from all affected process vents at the facility below 3 pounds per hour and 3.1 tons/year, or (2) reduce total organic emissions from all affected process vents at the facility by 95 weight percent.

IDEQ officials told us that they had conducted an evaluation showing the PEWE was in compliance with the Subpart AA requirements. We requested to review this analysis; however, IDEQ was unable to provide us with its evaluation results. Furthermore, IDEQ inspection records for INEEL covering the period from 1996 to 2002 and permitting files covering the period from 1996 to 2003 showed that IDEQ has not verified DOE's compliance with the emission standards specified by Subpart AA for the PEWE and its associated tank systems. We found that the inspection records did not include emissions information for the PEWE and associated tank systems.

In addition, permitting documents show that IDEQ only recently identified the need for DOE to demonstrate compliance with Subpart AA emissions standards for the PEWE and associated tank systems. On April 12, 2002 and May 2, 2003, IDEQ issued NODs addressing deficiencies with the Part B permit application for ILWMS.⁴ These NODs included requests for DOE to provide information demonstrating that the PEWE, associated tanks, and other regulated units are in compliance with the Subpart AA requirements. As of July 2003, IDEQ had not received the requested information from DOE.

Because compliance with Subpart AA requirements for the PEWE and its associated tanks has not been verified, IDEQ had no assurance these units were in compliance with the emissions standards as of July 2003 when we completed our field work.

IDEQ was unable to determine whether emissions from the PEWE and associated tank systems were in compliance with 40 CFR Subpart AA standards because IDEQ's inspections did not cover all major RCRA requirements. Our review of IDEQ's inspection records showed that IDEQ inspection coverage for the PEWE and other units at the ILWMS focused on RCRA requirements such as inspection logs, balance transfers, leak detection, and secondary

⁴This permit application includes the PEWE and its associated tanks systems. The application was originally submitted to IDEQ on June 29, 2001.

containment. According to IDEQ officials, the inspections did not evaluate compliance with all major RCRA requirements because of the large number of RCRA units located at INEEL. The officials explained that IDEQ conducts a 1-week annual RCRA compliance inspection of the facility and the large number of RCRA units requires that the evaluation of each unit be limited to those RCRA requirements determined to be appropriate by the inspector.

Subpart AA emissions standards are intended to reduce human health and environmental risks. Therefore, IDEQ needs to ensure annual inspections at the PEWE include compliance evaluations of Subpart AA requirements.

Compliance with Waste Characterization Requirements at ILWMS Not Verified

The petition alleged that IDEQ allows the PEWE and Liquid Effluent Treatment and Disposal⁵ (LET&D) facility, which are part of the ILWMS, to operate illegally because the wastes have not been characterized prior to treatment. The Region's response stated that there is no reason to believe that waste characterizations have not been made. The response also said that the Part B application for the PEWE and LET&D indicate that wastes are characterized prior to treatment.

Our review found that IDEQ did not verify whether waste characterization activities for the ILWMS met RCRA requirements until July 2001 even though it has generally conducted compliance inspections at INEEL annually since 1989. Under 40 CFR Part 265 an owner or operator is required to obtain a detailed chemical and physical analysis of a representative sample of the hazardous wastes prior to their treatment, storage, or disposal. The regulation also requires that a waste analysis plan which describes the waste characterization procedures be developed and followed. The minimum elements of the plan include:

- Parameters for each hazardous waste which will be analyzed and the rationale for the selection of the parameters.
- Test methods which will be used for these parameters.
- Sampling methods which will be used to obtain a representative sample of the waste to be analyzed.
- Frequency with which the initial analysis of waste will be reviewed or repeated to ensure that the analysis is accurate and up to date.

However, our review of IDEQ inspection records for INEEL covering the period from 1989 to 2002 and permitting and compliance files covering the period from 1990 to 2003 identified that IDEQ did not evaluate DOE's compliance with waste characterization requirements specified by Part 265 until July 2001. During the July 2001 inspection, IDEQ identified several deficiencies

⁵The LET&D facility consists of an evaporator tank system and two acid fractionators. The LET&D reduces PEWE overheads, and recovers nitric acid from PEWE overheads for potential reuse at other INTEC facilities.

with waste characterization for the ILWMS, including: (1) failure to maintain a waste analysis plan that specifically described the sampling methods that will be used; (2) failure to state how INEEL would determine the underlying hazardous waste constituents in waste generated at the point of generation of the waste; and (3) failure to maintain a waste analysis plan that described how compatibility of wastes will be determined.

IDEQ issued a notice of violation (NOV) to DOE on November 20, 2001, which requested a compliance conference to discuss violations identified during the inspection. A year later, in November 2002, IDEQ established a corrective action schedule for the waste characterization and other unresolved deficiencies identified during the inspection through a consent order with DOE. The consent order required resolution of the waste characterization deficiencies within 210 days of DOE's submission of a waste analysis plan to IDEQ.

In April 2003, DOE submitted a waste analysis plan to IDEQ as required by the consent order. However, the plan was incomplete and IDEQ issued a letter to DOE in May 2003 requesting corrections to the plan. In its response to the draft report, IDEQ informed us that DOE submitted a revised waste analysis plan on July 2, 2003, and it made a decision to accept the plan as complete on August 11, 2003.

The review of IDEQ's permitting and compliance files identified that IDEQ has also been addressing waste characterization issues with the ILWMS through the RCRA permitting process since April 2002. IDEQ issued NODs addressing deficiencies with the Part B permit application for the ILWMS on April 12, 2002, and May 2, 2003. However, as of July 2003, IDEQ had not received sufficient waste characterization information for the Part B application from DOE.

As discussed previously, IDEQ officials said that the large number of RCRA units at INEEL prevented IDEQ from conducting a comprehensive RCRA inspection for all the units. As a result, the ILWMS was not evaluated for compliance with waste characterization requirements until July 2001.

According to EPA's guidance manual for waste analysis, proper waste analysis is necessary to identify and classify hazardous waste in accordance with RCRA and to ensure the waste is managed properly. The guidance also discloses that the waste classification under RCRA determines the legal methods available for treatment, storage, or disposal of the waste. Since compliance with RCRA waste characterization requirements for the ILWMS was not evaluated prior to July 2001, there was no assurance that wastes were sufficiently characterized and their storage and treatment were protective of human health and the environment.

Conclusions

Region 10 generally relied on appropriate regulatory requirements and standards in reaching its conclusion that evidence did not exist to commence proceedings to withdraw the State of Idaho's authority to run its RCRA Hazardous Waste program. However, we identified instances where the Region did not fully assess all allegations. Our limited review of these allegations indicates that where permitting deficiencies were not corrected by DOE, years passed before any followup

actions were taken. Furthermore, we found that compliance with emissions requirements has not been verified and actions were only recently initiated to address waste characterization compliance issues associated with the ILWMS. Our limited review of practices at some facilities does not permit us to conclude that there is a program-wide deficiency in Idaho. However, the results of our review highlight how some of the deficiencies we observed, if known or observed by members of the public, could be taken to indicate much broader and serious program deficiencies, if not addressed directly and timely by Idaho or EPA officials.

We acknowledge Idaho State officials' comments that some of the weaknesses we observed were due to their need to prioritize work. We recognize the need for prioritization. However, IDEQ had a legal requirement to resolve the permit application deficiencies for the Calciner and HLLWE. A RCRA permit provides the legal authority to treat, store, or dispose of hazardous waste and establishes facility specific requirements and conditions which must be met in order to comply with the law. Compliance with the permit is the basic assurance that hazardous waste is handled in a controlled manner that is protective of human health and the environment. IDEQ needs to ensure due dates are established and appropriate followup actions are taken in order to prevent years of delay with resolving permit deficiencies as in the cases of the Calciner and HLLWE.

Recommendations

We recommend that the Region 10 Administrator:

1. Require that IDEQ timely addresses and resolves RCRA permit application deficiencies for the HLLWE. Specifically:
 - a. Require IDEQ to take appropriate actions to ensure that information necessary to resolve the application deficiencies for the HLLWE discussed in the June 1994 NOD are resolved by the Volume 14 partial permit.
 - b. Establish a milestone in IDEQ's annual State Grant Workplan for submission of the Class 3 permit modification for the HLLWE within 180 days of the effective date of the Volume 14 partial permit.
2. Advise IDEQ that NODs issued to resolve RCRA permit application deficiencies are required under 40 CFR Part 124 to include a date for submitting information necessary to address the deficiencies.
3. Require that IDEQ inspections at INEEL include evaluations of the PEWE and its associated tanks to determine compliance with 40 CFR Part 265 Subpart AA emissions requirements. In addition, advise IDEQ that inspections at INEEL continue to include evaluations of the ILWMS to determine compliance with waste characterization requirements specified by 40 CFR Part 265.

4. Verify that Recommendations 1 through 3 have been completely implemented during the Region's next scheduled review of IDEQ's Hazardous Waste Program. Require IDEQ to establish an action plan for any recommendations that have not been completely implemented.

Region 10 and IDEQ Responses and OIG Evaluations

We received the Region's and IDEQ's responses to the draft report on November 24, 2003. We also met with the Region and discussed its response to the recommendations on December 11, 2003. During the meeting, we agreed to revise Recommendation 1 and the Region agreed to revise its response for Recommendations 3 and 4. The Region submitted a revised response to the OIG on January 27, 2004.

The Region agreed with the recommendations and provided comments addressing some details in the findings. IDEQ disagreed with the findings and stated that the report's conclusions and recommendations go beyond the purpose of our evaluation. We made minor revisions to the report as appropriate based on the Region's and IDEQ's responses.

The Region's and IDEQ's responses and our evaluation of their comments are discussed below. The Region's and IDEQ's complete responses are contained in Appendices D and E, respectively.

Region 10's Response to Draft Report

The Region agreed to the recommendations and provided comments addressing some details in the findings.

For Recommendation 1, the Region stated that it will identify permitting of the HLLWE as a priority in the annual State Grant Workplan. The Region also said that it will add a commitment to the workplan specifying submission of the Class 3 Permit Modification Request to add the unit within 180 days of the effective date of the Volume 14 partial permit as a milestone under the grant. In addition, the Region said that it would implement Recommendation 2 by adding the requirement to include a response date when issuing a NOD as a performance measure under the State Grant Workplan, which will be reviewed quarterly.

With regard to Recommendation 3, the Region stated it will require under the State Grant Workplan that IDEQ inspections at the INEEL periodically include evaluations of the ILWMS and its associated units to determine compliance with 40 CFR Part 265 Subpart AA emission requirements. It will also advise IDEQ that inspections at INEEL continue to include evaluations of the ILWMS to determine compliance with waste characterization requirements specified by 40 CFR Part 265.

The Region stated in response to Recommendation 4 that it will track IDEQ performance as part of the State Grant Workplan monitoring process and require IDEQ to develop an action plan for any unimplemented recommendations. In addition, it will review permitting correspondence

submitted by INEEL and IDEQ to ensure that both Recommendations 1 and 2 are met. The Region said that it will ensure that Recommendation 3 is met by designating the next inspection of the INEEL ILWMS as an oversight inspection, with a Region 10 EPA inspector participating on the inspection team in an oversight capacity.

In regard to the Calciner, the Region stated that the NOD issued by IDEQ did not finalize a date for submittal of the information necessary to complete the application, but acknowledged DOE's proposed schedule and indicated that IDEQ had questions and concerns with the schedule. The Region noted that while IDEQ did not formally approve DOE's schedule, work was performed on parts of the schedule, including emission testing beginning in 1991-1992, a risk assessment of emissions during the 1993-1997 timeframe when the Calciner was shut down, and efforts to identify and develop other technologies to treat wastes processed by the unit. The Region also said it did not believe that any followup action was necessary for the Calciner because a closure plan had been approved in November 2002.

With respect to the HLLWE, the Region said that the draft report did not acknowledge significant permitting activity associated with the July 1993 permit application and the June 1994 NOD, including the Flourinel and Fuel Storage Facility and ongoing permitting activities at the LET&D. The Region stated that it believes Idaho committed significant resources between the NOD and the present time to permitting units contained in the 1993 permit application.

In addition, the Region stated that calculations to demonstrate the PEWE's compliance with Subpart AA requirements were included with EPA's March 7, 2002, response to the petition and appear to meet the threshold for demonstrating compliance with the interim status standards. IDEQ requested additional information through the NOD process to ensure proper permitting of the PEWE. The Region also said the use of the NOD is not evidence of noncompliance with regulatory standards.

The Region stated that it does not believe that IDEQ had to verify compliance with waste characterization requirements in response to our finding concerning waste characterization for the ILWMS. However it agreed with the draft report that inspections of all interim status facilities should include a review of all applicable requirements including waste analysis requirements. The Region also noted that the June 1993 WINCO-1132 (Westinghouse Idaho Nuclear Company Listed Waste Determination Report) and February 1999 Gilbert reports verified hazardous wastes which entered or left the PEWE and that these analyses were specific enough to provide the information necessary to treat, store, or dispose of hazardous waste in accordance with 40 CFR Part 265. Notwithstanding the deficiencies identified for the ILWMS during the 2001 inspection, IDEQ inspection and enforcement personnel did find that DOE complied with the requirement to have a waste analysis plan as required by 40 CFR Part 265. IDEQ used this plan to verify that only appropriate wastes were treated at the PEWE.

OIG Evaluation of Region 10's Response

The Region's planned actions satisfactorily implement the recommendations. In response to the final report, the Region needs to provide milestones for completion of planned actions for each recommendation.

We agree that DOE was working toward resolving some of the permitting issues for the Calciner during the approximate 6-year period following the December 1991 NOD. While the NOD acknowledged and disclosed concerns with DOE's proposed schedule, IDEQ did not require DOE to identify how issues were resolved and provide a schedule for resolution of the remaining permitting issues until October 1997. We emphasize that 40 CFR Part 124 requires that a NOD specify a date for submitting information necessary to correct permit application deficiencies. Compliance with this requirement may have resulted in more transparent expectations on resolving the permitting issues for the Calciner and a more timely closure decision. As discussed in the report, the permit application was submitted to IDEQ in October 1991 and the decision to close the unit was not made until May 2000, or more than 8 years later. Regarding the Region's position that no followup action is to be taken on the issue of the Calciner, our draft report clearly disclosed that no followup action is required by the Region.

With respect to the Region's comments on the HLLWE, we clearly disclosed in the report that the scope of our field work at IDEQ was limited to the Calciner, the HLLWE, and the PEWE. These units were selected because they provided the broadest coverage of major permitting and enforcement allegations discussed in the petition. Of these three units, the HLLWE was the only unit included in the 1993 Volume 10 Permit Application. As a result, we are unable to comment on the permitting activities for the other units included in the permit application and 1994 NOD. Furthermore, the Region's comments on these other units do not change our conclusions on permitting activities for the HLLWE.

We evaluated the engineering calculations included in the Region's March 2002 response to the petition during of our review. These calculations were from the Part B application for the ILWMS. Although the Region commented that these calculations appear to meet the threshold for demonstrating compliance with Subpart AA standards, NODs issued by IDEQ on the permit application found that DOE had not demonstrated whether emissions from all affected process vents could be maintained below regulatory limits. We agree that the NODs requesting information demonstrating that the PEWE is in compliance with Subpart AA requirements do not necessarily demonstrate the unit is not in compliance with the emission standards. However, the NODs show that IDEQ had not obtained sufficient information to verify whether the unit was operating in compliance with the emission standards.

The Region's position that IDEQ was not obligated to verify compliance with waste characterization requirements for the ILWMS is not consistent with the requirements of 40 CFR Part 271. Part 271 specifies that States are required to have inspection and surveillance procedures to determine, independent of information supplied by regulated parties, compliance or noncompliance with program requirements. We agree that the WINCO-1132 and Gilbert Reports referred to by the Region provided information on wastes treated in the ILWMS.

However, these reports do not demonstrate whether IDEQ had independently verified whether the PEWE was in compliance with Part 265 waste characterization requirements. We also agree with the Region that IDEQ's July 2001 inspection identified that DOE had a waste analysis plan for the ILWMS. However, IDEQ also found that this plan was incomplete. As discussed in our report, IDEQ found that the plan was missing critical waste characterization information required by Part 265, including sampling methods. IDEQ disclosed in its response to the draft report that DOE did not submit an acceptable waste analysis plan until July 2003. Therefore, prior to July 2003, IDEQ was unable to adequately evaluate and verify the waste characterization activities for the PEWE.

IDEQ's Response to Draft Report

IDEQ disagreed with the findings and stated that it was concerned with the overall tone and direction of the report in comparison to the stated purpose of the review. The stated purpose of the review "was to determine whether Region 10's response to the September 2001 petition addressed the issues and was supported by documentation." IDEQ said that the report goes beyond this purpose by making specific findings of shortcomings in IDEQ's program and recommending corrective actions by IDEQ rather than how EPA should more adequately respond.

IDEQ also stated that while the report notes the shutdown of the Calciner, the report fails to note that IDEQ was informed by DOE that it might not run the Calciner in the future. In addition, the report fails to note that the Department's decision to cease permitting actions at the Calciner was premised on the non-operation of the unit coupled with doubt as to whether it would ever run again. Furthermore, the report fails to note the work of DOE and IDEQ during the period from 1991 through 1997 to resolve risk assessment issues and off-gas sampling methods that were major obstacles to submission of a complete application by DOE. IDEQ also said to imply from the absence of an administrative requirement under 40 CFR 124.3 that nothing was done to resolve permitting issues at the Calciner is a gross oversimplification and mischaracterization of the facts.

IDEQ stated that, rather than noting that the allegation that a permit application for the HLLWE was not filed was false, we criticize IDEQ's failure to resolve a NOD relating to this permit application. IDEQ also said the report fails to note that it addressed many deficiencies related to this permit application, except those related to the HLLWE.

IDEQ also believed that some report statements appear to be exaggerations based on the limited scope of the review. IDEQ stated that the report's findings regarding noncompliance with 40 CFR 124.3 are premised on NODs authored in 1991 and 1994. Therefore, the report implies that historical "minor" deviations from regulatory requirements constitute systemic and ongoing problems within IDEQ.

IDEQ said that from 1993 through 1998, DOE advised that the PEWE was a closed-loop, zero emissions unit with no process vents. Therefore, Subpart AA was deemed inapplicable and inspections for Subpart AA compliance would not have occurred. In 1998, when IDEQ became

aware through discussions with the Permitting Program that the PEWE was not a zero emission unit, IDEQ at that time required DOE to conduct a review to confirm compliance with Subpart AA for the PEWE and LET&D. IDEQ has since concluded that the air emissions standards of Subpart AA are being met. IDEQ also stated that despite the absence in inspection records, the Department has conducted a review of this issue on several occasions and has made a compliance determination regarding this provision. It also noted that requesting that DOE provide information as part of its Part B permit application does not suggest that IDEQ had not previously reviewed this for purposes of determining compliance.

With regard to the ILWMS, IDEQ said it verified DOE is in compliance with 40 CFR Part 265 waste characterization requirements through DOE's 1993 WINCO-1132 Report, and a site wide waste analysis plan which it approved in 1995. This waste analysis plan was deemed sufficient to indicate compliance with the Part 265 requirement to have sufficient chemical and physical analysis for treatment. IDEQ also said the 1999 Gilbert Report verified the wastes entering the PEWE. In addition, IDEQ stated that the issuance of the NOV in 2001 related to DOE's failure to maintain a waste analysis plan specific to the ILWMS should not be seen as an indication that waste characterization was insufficient. IDEQ said the NOV relates to administrative/record keeping requirements.

Furthermore, IDEQ stated that the report focuses solely on inspection reports and permitting documents for its conclusions. This focus solely on inspection reports and permitting documents ignores the substantial amount of work that goes on outside the context of these regulatory paradigms. The report fails to note that IDEQ meets with DOE at least quarterly to discuss compliance issues and includes in these meetings many issues that arise outside the scope of inspections and enforcement actions.

OIG Evaluation of IDEQ's Response

We disagree that the report goes beyond the stated purpose of the review. The purpose and scope of this review were discussed with IDEQ during our entrance conference, which was held with IDEQ on March 31, 2003. As discussed during the entrance conference, it was necessary for us to evaluate IDEQ's regulatory actions for a limited number of RCRA units at INEEL in order to verify the Region's position on the allegations in the petition. Our evaluation identified deficiencies in IDEQ's permitting and compliance activities. As a result, our report discusses these findings and recommends specific corrective actions.

We revised the report to disclose that DOE informed IDEQ of the possibility of a permanent shutdown of the Calciner. In addition, we revised the report to identify IDEQ's doubt about a future restart of the unit. Although IDEQ was informed by DOE that the Calciner may or may not operate, 40 CFR Part 270 requires that DOE either provide the full information required by the Part B application or initiate closure. Furthermore, IDEQ's doubt as to whether the Calciner would ever run again did not relieve IDEQ's regulatory responsibility under Part 270 to require the unit be permitted or closed. We also note that the Calciner was restarted in 1997, and IDEQ did not establish a due date for submitting information to correct unresolved permit application deficiencies until October 1997, or 6 years after the deficiencies were identified.

We acknowledge that DOE was working toward resolving some of the permitting issues for the Calciner during the approximate 6-year period between the December 1991 NOD and the October 1997 followup letter. However, the permit application deficiencies were not corrected during this 6-year period where IDEQ had not required DOE to meet a specific due date or schedule for providing information necessary to complete the permit application. Under 40 CFR Part 124, IDEQ has a responsibility to specify a date for submitting information necessary to correct permit application deficiencies in NODs. Compliance with this requirement may have resulted in more transparent expectations on resolving the permitting issues for the Calciner and a more timely closure decision.

In regard to IDEQ's comments on the HLLWE, the report acknowledges that a permit application for the HLLWE and several other units was submitted to IDEQ in July 1993. As discussed in the report, this application was not complete, and IDEQ did not follow up on a NOD requesting information to correct the deficiencies for almost 8 years. We did not evaluate IDEQ's actions to address the deficiencies related to other units included in the July 1993 permit application because they were not included in the scope of our review. As a result, we cannot express an opinion on the IDEQ's permitting actions for these other units.

We disagree that the weaknesses in IDEQ's permitting and oversight activities discussed in the report are exaggerations. Because the scope of our review was limited to three of the units at INEEL discussed in the petition to Region 10, we clearly disclose in our report that we cannot conclude that there are program-wide deficiencies in Idaho. Nonetheless, our review of IDEQ's permitting and oversight activities for INEEL identified years of delay with follow up actions for resolution of permit application deficiencies for the Calciner and HLLWE. Furthermore, we found that compliance with emissions requirements has not been verified and actions were only recently initiated to address waste characterization compliance issues associated with the ILWMS. We also do not agree that the failure to establish due dates in NODs requesting information necessary for making permitting decisions as required by 40 CFR 124 are minor deviations from regulatory requirements. In the cases of the Calciner and the HLLWE, IDEQ's deviation from this requirement contributed to the delays in the permitting process for these two units.

DOE's assertions regarding whether the PEWE was subject to Subpart AA are not substitutes for IDEQ's independent assessment of compliance with the regulations. 40 CFR 271 requires States to have inspection and surveillance procedures to independently verify compliance or noncompliance with regulatory requirements. Although IDEQ told us during field work and in its response that it has concluded that the PEWE is in compliance with 40 CFR Subpart AA, IDEQ was unable to provide documentation we requested to support this conclusion. We agree the NOD on the permit application for the PEWE does not necessarily demonstrate noncompliance with a regulation. However, this NOD shows that IDEQ had not obtained sufficient information to make a decision on compliance with Subpart AA for permitting the PEWE. Regarding IDEQ's statement that they had conducted a review of this issue, during our review, IDEQ did not provide any documentation demonstrating they had evaluated compliance with the requirements as requested.

With regard to the ILWMS, the WINCO-1132 and Gilbert Reports provided information on wastes treated in the ILWMS. However, as noted earlier, these reports do not demonstrate whether IDEQ had independently verified whether the PEWE was in compliance with Part 265 waste characterization requirements. Although IDEQ stated that the site-wide waste analysis plan indicates that the ILWMS is in compliance with waste characterization requirements, the more relevant plan is DOE's waste analysis plan for the ILWMS. IDEQ evaluated this plan during its July 2001 inspection at INEEL and found it was missing critical waste characterization information. According to IDEQ, DOE did not submit an acceptable waste analysis plan until July 2003. Therefore, IDEQ was unable to adequately evaluate and verify the waste characterization activities for the PEWE until submission of this corrected plan.

We disagree with IDEQ's position that its NOV addressing deficiencies with the waste analysis plan for the ILWMS relates to administrative/record keeping requirements. Part 265 specifically requires that the waste analysis plan describe procedures used to characterize wastes prior to treatment, storage, or disposal. The deficiencies with the waste characterization plan for the ILWMS discussed in IDEQ's NOV included insufficient descriptions of sampling methods and waste compatibility determinations. These processes are critical for ensuring hazardous wastes are managed in a manner that is protective of human health and the environment.

Our review and conclusions were not based solely on inspection reports and permitting documents. The report clearly discloses that we reviewed IDEQ Hazardous Waste Program permitting, closure, compliance, and enforcement files and interviewed officials in IDEQ's Hazardous Waste Program and State of Idaho's Office of Attorney General. Our review of IDEQ files was comprehensive and included relevant meeting minutes. We also requested that IDEQ provide us with any information supporting its regulatory decisions which was not maintained in the official files. For example, we requested that IDEQ provide information which showed that it had evaluated compliance with the waste characterization requirements for the ILWMS. However, IDEQ did not provide this information during the review or as part of its response to the draft report.

Appendix A

Major Petition Allegations

Major Allegations	Primary Issues Used to Support Petition Allegations
1. Failure to Exercise Control in Requiring Permits.	<p>a. IDEQ granted DOE years to comply with Part A and B application requirements for the Calciner and Waste Experimental Reduction Facility.</p> <p>b. IDEQ allows hazardous waste operations at INEEL facilities under consent orders and other non-RCRA categories.</p>
2. Failure to Analyze Applicable Standards for Permitting.	<p>a. IDEQ allows piecemeal permitting to avoid public scrutiny of operations.</p> <p>b. No permit application has been filed for the HLLWE and it is not included on the Part B application.</p>
3. Continuing Operation of Facilities Under Interim Status Without Permits That Conform to RCRA Requirements.	<p>a. PEWE is a thermal treatment facility but has been incorrectly defined as a tank treatment unit or other treatment.</p> <p>b. LET&D is an unpermitted facility.</p> <p>c. PEWE and LET&D treat F-listed wastes without combustion technology.</p> <p>d. PEWE and LET&D operate illegally because wastes have not been characterized prior to treatment.</p> <p>e. Tanks and vessels are not compliant with RCRA permit requirements and have been omitted from the Part B application.</p>
4. Failure to Comply with Public Participation Requirements.	<p>a. IDEQ acceptance of an incomplete Part B application for the PEWE prevents a full public analysis.</p> <p>b. Secret RCRA quarterly permitting meetings are held with DOE.</p>
5. Failure to Act on Violations of Permits and Program Requirements and to Seek Adequate Enforcement of Penalties.	<p>a. IDEQ allowed the Calciner to operate under thermal treatment requirements because it could not comply with incinerator requirements.</p> <p>b. IDEQ failed to conduct an adequate inspection for the Specific Manufacturing Capability Facility.</p>
6. Failure to Comply with Terms of the MOA.	<p>a. IDEQ is incapable of administering the program in accordance with Federal statutes.</p>
7. Failure to Initiate Closure Orders for Non-Compliant Operations.	<p>a. Discussed throughout petition with respect to numerous INEEL facilities.</p>
8. IDEQ is underfunded, understaffed, and too closely associated with DOE.	<p>a. IDEQ's programmatic budget is not adequate to oversee INEEL and funding received from DOE creates the impression of collaboration.</p>

Appendix B

Background on Idaho National Environmental and Engineering Laboratory

INEEL covers 571,000 acres (893 square miles) in southeastern Idaho. INEEL was established by the Federal Government as the National Reactor Testing Station in 1949. Its purpose was to provide an isolated location where prototype nuclear reactors could be designed, built, and tested. Most of the reactors were phased out after completing their research mission. Programmatic emphasis has shifted away from reactor development and defense-related work toward multi-program research, hazardous and radioactive waste management, cleanup, and environmental technology development.

The February 2003 revision to the Part A permit application for INEEL lists 48 RCRA units, of which there are 20 permitted units, 27 interim status units, and 1 post closure unit. Most of the allegations in the September 2001 petition pertain to RCRA units at INEEL's Idaho Nuclear Technology and Engineering Center (INTEC).

From 1951 to 1991, the U.S. Department of Energy and its predecessor agencies reprocessed spent nuclear fuel at INTEC. Reprocessing operations at INTEC used solvent extraction systems to remove primarily Uranium 235 from spent nuclear reactor fuel. Spent nuclear fuel reprocessing generated mixed high level and mixed transuranic waste/sodium bearing wastes.

Wastes Generated at the INTEC	
Waste	Description
Mixed	Waste that contains source, special nuclear, or by product material subject to the Atomic Energy Act of 1954, and hazardous waste subject to RCRA.
High Level	Highly radioactive material resulting from reprocessing spent nuclear fuel that contains fission products in sufficient concentrations and other highly radioactive material that is determined, consistent with existing law, to require permanent isolation.
Transuranic	A specific type of waste created from the processing of nuclear materials. Transuranic elements include plutonium, americium, curium, and neptunium.
Sodium Bearing	A liquid radioactive waste which contains large quantities of sodium and potassium nitrates. Radionuclide concentrations for liquid sodium bearing waste are generally 10 to 1,000 times less than for liquid high level waste.

When spent nuclear fuel processing was discontinued in 1991, liquid mixed high level waste ceased to be generated. However, since that time, mixed transuranic/sodium bearing waste has continued to be generated from calcine, decontamination, and other operations at the INTEC.

INTEC consists of several RCRA treatment and storage units. These units include the New Waste Calcining Facility Calciner (Calciner) and the INTEC Liquid Waste Management System (ILWMS). The Calciner operated from September 1982 through May 2000. Calcination is performed by spraying wastes onto a heated, air-fluidized bed of granular solids. The liquid

evaporates and the radioactive fission products adhere to the granular material creating a dense powder similar in consistency to powdered detergent. The Calcine is transferred and stored at the Calcined Solids Storage Facilities located at INTEC.

Prior to calcination, wastes were processed in the ILWMS for volume reduction and concentration, which make the waste more amenable to calcination. The ILWMS also reduces the volume of hazardous liquid wastes sent to the INTEC tank farm. The ILWMS includes the Process Equipment Waste Evaporator System (PEWE), the Liquid Effluent Treatment and Disposal System (LET&D), the High Level Liquid Waste Evaporator (HLLWE), and associated tanks and ancillary equipment.

The PEWE system consists of a thermosiphon evaporator and an assortment of storage and treatment tanks. The PEWE evaporates wastes, producing concentrated wastes (bottoms) and vapor condensates (overheads). The bottoms are transferred to tanks, then routed to either the tank farm or the HLLWE for further processing. The overheads are sent to the LET&D for further processing.

The LET&D system consists of an evaporator tank system and two acid fractionators. The LET&D reduces PEWE overheads, and recovers nitric acid from PEWE overheads for potential reuse at other INTEC facilities.

The HLLWE is a thermal evaporator which reduces liquid wastes from decontamination, waste treatment, and other activities. HLLWE overheads are routed to the PEWE, while bottoms are sent to the tank farm.

Appendix C

Details on Scope and Methodology

The evaluation included a review of the September 13, 2001 petition to the Region, the Region's March and June 2002 responses to the petitioners, and the petitioners' April and July 2002 rebuttals to the Region's responses. We also conducted limited field work at IDEQ in order to independently assess the validity of allegations made in the petition for three selected RCRA units at INEEL. The petition included allegations concerning INEEL's noncompliance with the Clean Air Act. Because the petition requested withdrawal of EPA's authorization of IDEQ's Hazardous Waste Program, only allegations that pertained to compliance with RCRA were evaluated.

We did not review IDEQ's management of all RCRA facilities in Idaho. The evaluation scope covered allegations discussed in the September 13, 2001, petition to Region 10 requesting withdrawal of EPA's authorization of IDEQ's Hazardous Waste Program. As a result, management controls for the IDEQ's Hazardous Waste Program were not assessed.

Our review was based primarily on the following criteria:

- Subtitle C of the Resource Conservation and Recovery Act
- 40 CFR Part 124, Procedures for Issuing, Revoking, Reissuing or Terminating Permits
- 40 CFR Part 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- 40 CFR Part 265, Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- 40 CFR Part 270, The Hazardous Waste Permit Program

Field work was conducted at IDEQ to evaluate IDEQ's permitting, enforcement, and public participation processes covering the period April 1990⁶ through July 2003. We limited our field work to three of the INEEL units discussed in the September 2001 petition. We selected RCRA units at INEEL which provided the broadest coverage of the major permitting and enforcement allegations discussed in the petition. We also toured INEEL's INTEC Facility in order to obtain a better understanding of the facility.

The units selected were the New Waste Calcining Facility Calciner and two units from the ILWMS. These two units were the HLLWE and PEWE. The review of the PEWE also included

⁶ April 1990 was the effective date of authorization of the State of Idaho's Program to administer requirements of 40 CFR Parts 124, 264, 265, and 270.

the tanks associated with the unit. We evaluated allegations concerning these three units by reviewing IDEQ Hazardous Waste Program permitting, closure, compliance, and enforcement files covering the period April 1990 through July 2003. We also interviewed officials in IDEQ's Hazardous Waste Program and the State of Idaho's Office of Attorney General.

Appendix D
EPA Region 10's Response



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

November 24, 2003

Reply To
Attn Of: OWC-

Ms. Carolyn Copper
Director For Program Evaluation: Hazardous Waste Issues
Office of Program Evaluation
United States Environmental Protection Agency
Washington, D.C. 20460

Re: Written Comments in accordance with EPA Manual 2750 on the October 24, 2003 "Draft Evaluation Report for the Review of EPA's Response to Petition Seeking Withdrawal of Authorization for Idaho's Hazardous Waste Program, Assignment No. 2003-000583"

Dear Ms. Copper:

In accordance with Environmental Protection Agency (EPA) Manual 2750, I am providing written comments as the Regional Administrator for Region 10 and as the primary Action Official on the draft Evaluation Report (Draft Report) received by my office on October 24, 2003. The Draft Report concerned the Office of the Inspector General's "Review of EPA's Response to Petition Seeking Withdrawal of Authorization for Idaho's Hazardous Waste Program."¹ The Region agrees with the Draft Report's conclusion that appropriate regulatory requirements and standards were used by the Region in reaching its decision that evidence did not exist to commence proceedings to withdraw the State of Idaho's authorized hazardous waste program.² However, the Region would like to take this opportunity to address the Evaluation Results and Recommendations outlined in the Draft Report.

Compliance Schedule Not Required to Resolve Calciner Permit Deficiencies (p.5 of the Draft Report)

The Federal regulations address applications for RCRA Part B permits, including information to be specified in a notice of deficiency. *See* 40 CFR Part 124 - Procedures for Decisionmaking; 40 CFR § 124.3(c). The authorized hazardous waste program in Idaho incorporated Subparts A and B of 40 CFR Part 124 by reference with certain exceptions. *See* IDAPA 58.01.05.013 Procedures for Decision-Making (State Procedures for RCRA or HWMA Permit Applications). 40 CFR § 124.3(c) is incorporated by reference in Idaho's authorized regulations. This provision states: "The Regional Administrator shall specify in the notice of deficiency a date for submitting the necessary information." The authorized regulations in

Idaho's hazardous waste program define "Regional Administrator" as "Director" for this provision. In the event deficiencies are not corrected, 40 CFR § 124.3(d), also incorporated by reference in Idaho's authorized regulations, provides that "the permit may be denied and appropriate enforcement actions may be taken under the applicable statutory provision . . .", which could include the establishment of a compliance schedule. There is a clear requirement in the regulations that notices of deficiency specify a date for a permit applicant to supply missing information. However, the requirement to "specify in the notice of deficiency a date for submitting the necessary information" cannot be read to mandate a schedule of compliance. Although IDEQ should have specified a date in the notice of deficiency for DOE to submit the necessary information, nothing required IDEQ to establish a compliance schedule for resolving Part B application deficiencies. Establishment of such a schedule as an enforcement response was available to IDEQ as a matter of enforcement discretion but was not a mandatory enforcement response to resolve application deficiencies in the Calciner Part B application.

Nor is there a requirement on the part of the Administrator to require the State to issue a schedule of compliance for resolving the notice of deficiency. The Administrator would, if cause existed, presumably have discretion under 40 CFR § 211.22 to specify schedules of compliance as a corrective action for the State to take to resolve outstanding notices of deficiency for Part B applications. Again, however, this would be a matter of enforcement discretion and not a mandatory response.

This issue appears to be moot, since the Draft Report acknowledges that IDEQ's followup actions "ultimately result[ed] in a consent order that established a specific schedule for permitting the unit or submitting a closure plan." *See* Draft Report, page 7.

As the Region had indicated in the April 2003 "EPA Response to the EPA Office of Inspector General (OIG) Follow-up Questions on Region 10's Responses to the September 2001 Petition for Withdrawal of Idaho Department of Environmental Quality's (IDEQ's) Resource Conservation and Recovery Act (RCRA) Authority (April 2003 Response), the notice of deficiency (NOD) issued by IDEQ to DOE regarding the Calciner, Letter of December 31, 1991 "Determination that the Part B Application for the New Waste Calcining Facility was Incomplete" (December 1991 Letter), did not finalize a date for the submittal of the information necessary to complete the application but was not silent on this issue either. IDEQ, in the December 1991 letter, acknowledged DOE's proposed schedule (December 24, 1991) for submittal of the missing information. The December 1991 letter indicated that IDEQ had questions and concerns with the DOE schedule that needed to be addressed. DOE's December 24, 1991 letter made reference to having contacted IDEQ concerning the development of a schedule for submitting information to support the Calciner Part B application. A major part of DOE's proposed schedule included the development of a plan for, and performance of, emission testing. IDEQ did not formally approve DOE's schedule but work on emission testing began in 1991-1992. *See* attached white paper providing detailed information on the results of the 1991-1992 activities to investigate the applicability of EPA test methods in measuring the Calciner offgas. *See also* attached minutes of 1995 meeting of IDEQ and DOE indicating efforts towards

resolving roadblocks to emission testing of Calciner. Risk assessment of emissions, another major part of the schedule, were ongoing during the 1993-1997 time frame when the Calciner was shut-down and DOE had commenced efforts to identify and develop other technologies to treat wastes processed in the Calciner. *See* attached June 1994 Interim Report on Technologies Evaluation. On June 1, 2000, DOE ceased operations of the Calciner. IDEQ conducted a public comment period on DOE's closure plan for the Calciner from September 16, 2002 through October 16, 2002. The closure plan was approved on November 19, 2002. As a result, Region 10 does not believe that there is any follow-up action to be taken on the issue of a schedule of compliance.

Compliance Schedule Not Required to Resolve Permit Deficiencies for the ETS [HLLWE] (p.9 of the Draft Report)

As discussed in the preceding section, the regulations say that a notice of deficiency "shall set a date to submit necessary information." The regulations do not require a schedule of compliance. Nor is there a regulation that compels the Administrator to require the authorized permitting authority, here IDEQ, to issue a schedule of compliance to resolve the notice of deficiency.

With respect to the ETS [HLLWE] Part B Permit application, as noted in the Region's April 2003 Response, the DOE is already on record with a commitment "to submit a Class 3 Permit Modification Request to add the ETS [HLLWE] within 180 days of the effective date of the Volume 14 partial permit" at the INEEL facility. This commitment is documented in the December 17, 2002 "Volume 14 Part B Partial Permit Application" (Volume 14) and is a direct response to the April 12, 2002 NOD which required a schedule for permitting the ETS [HLLWE]. We believe that Volume 14 demonstrates that significant and complex units are being addressed, with the future addition of the ETS [HLLWE] integrated into an overall permitting schedule strategy. The Region has no information to suggest that this current schedule is inappropriate or requires an enforcement response on the part of the Region or the State of Idaho.

By focusing exclusively on the ETS [HLLWE] unit, the Draft Report does not acknowledge significant permitting activity associated with the July 21, 1993 permit application and the June 30, 1994 NOD. These permitting accomplishments include the Fluorinel and Fuel Storage Facility (FAST) and ongoing permitting activities at the Liquid Effluent Treatment and Disposal Facility (LET&D). Both of these units were included in the original Volume 10 RCRA Part B Permit Application submitted on July 21, 1993. Based on EPA's analysis of the INEEL permitting workload (see attached Idaho Permit Events by Unit Report), we believe that Idaho committed significant resources between the June 30, 1994 NOD and the present time permitting units contained in the July 21, 1993 Part B permit application.

Given that IDEQ and DOE have already established a strategy to integrate the HLLWE into the permitting schedule, it does not appear to the Region to be necessary to require IDEQ to immediately initiate a followup or enforcement action on the July 30, 1994 NOD, as recommended in the Draft Report.

Air Emission Data for PEWE Was Not Required to be Collected (p. 10 of the Draft Report)

The RCRA regulations at 40 CFR § 265 Subpart AA regulate air emissions from “process vents” for certain types of hazardous waste management units. The Draft Report cites that under Subpart AA owners and operators of process vents associated with a variety of treatment units are subject to these air emission standards. The PEWE was identified in the Draft Report as a unit subject to Subpart AA, however, the PEWE is part of an overall, multiple unit system for which Subpart AA was applied. According to 40 CFR Part 265.1032(c) a facility may use engineering calculations to demonstrate compliance with the Subpart AA regulations. These calculations were included on page C-23 of Attachment G in EPA’s March 7, 2002 Response to Petition and appear to meet the threshold for demonstrating compliance with the interim status Subpart AA standards. In order to refine these calculations, IDEQ requested additional information through the NOD process to ensure proper permitting of the unit. The use of the NOD, issued to obtain more information to complete the Volume 14 partial permit, is not evidence of non-compliance with the regulatory standards.

IDEQ is Not Required to Verify Compliance of Facility with Waste Characterization Requirements at ILWMS (p.12 of the Draft Report)

The Draft Report stated that “IDEQ had not verified whether waste characterization activities for the ILWMS had met RCRA requirements.” The Region does not believe that IDEQ had to verify compliance with waste characterization requirements. IDEQ could evaluate whether or not DOE did not comply with applicable regulations but would not be obligated to verify compliance. The regulations at 40 CFR 265.13(a)(1) (incorporated by reference into the authorized program in Idaho) require that before an owner or operator treats, stores or disposes of any hazardous waste, the owner or operator must obtain a detailed chemical and physical analysis of a representative sample of the waste. The analysis must contain all the information necessary to treat, store or dispose of the hazardous waste in accordance with the regulations. The regulations at 40 CFR 265.13(a)(2) (incorporated by reference into the authorized program in Idaho) state that the analysis may include data developed under Part 261, and existing published or documented data on the hazardous waste or on waste generated from similar processes.

As explained in the EPA Response to the EPA Office of Inspector General Questions (pages 42-43), in June of 1993, the DOE at INEEL developed a report called the WINCO-1132 Report. This report confirmed which of the wastes that were listed on the Part A form entered, or

did not enter, the PEWE evaporators. In February 1999, a follow up study, called the Gilbert Report, reevaluated the WINCO-1132 and verified that only four hazardous waste codes entered or left the PEWE. These two analyses of the data were specific enough to provide all the information that was necessary to treat, store or dispose of the waste in accordance with the regulations as required by 40 CFR 265.13(a)(1) - (2). Further, the classification of wastes provided in these reports was adequate to determine the legal methods available for treatment, storage, or disposal of the waste, including compliance with the requirements specified in the 40 CFR Part 268 Land Disposal Restrictions (incorporated by reference into the authorized program in Idaho) that specify treatment standards that must be met prior to land disposal of hazardous wastes.

During the IDEQ 2001 inspection of the INEEL, IDEQ identified several deficiencies with waste characterization for the ILWMS. These deficiencies included: (1) failure to maintain a waste analysis plan that specifically described the sampling methods that will be used; (2) failure to state how DOE at INEEL would determine the underlying hazardous waste constituents in the waste generated at the point of generation of the waste; and (3) failure to maintain a waste analysis plan that described how compatibility of wastes will be determined. However, notwithstanding the deficiencies identified for the ILWMS, IDEQ inspection and enforcement personnel did find that DOE did comply with the requirement to have a waste analysis plan as required by 40 CFR Part 265 for interim status facilities. Further, IDEQ personnel used this plan to verify that only appropriate wastes, as defined by the waste analysis plan, were treated in the PEWE. This verification occurred well in advance of the receipt by EPA of the Petition to withdraw EPA's authorization of the Idaho program.

Generally, the role of the compliance inspector is to verify that the waste characterization has been performed and a waste analysis plan has been prepared that appears to address all the elements required by the regulations. The Draft Report itself acknowledges that the permitting review process is the most effective means for assuring that wastes have been sufficiently characterized and that their storage and treatment are protective of human health and the environment.

In the case of the July 2001 enforcement action mentioned above, the IDEQ personnel reviewing the ILWMS permit application noticed deficiencies with respect to waste analysis that needed to be corrected prior to permitting the PEWE. IDEQ took immediate action. The Region considers this to be a sign of program success. The Region agrees with the Draft Report that timely permitting is essential to protecting human health and the environment. The NOD is a tool used by the permitting agency to obtain information necessary and required for issuance of a permit and should not be confused with whether or not a facility has complied with the regulations requiring it to have a waste analysis plan. The Region agrees with the Draft Report that inspections of all interim status facilities, and not just the ILWMS, should include a review of all applicable requirements including the waste analysis requirements found at 265.13.

Conclusions in the Draft Report

The Draft Report discusses conclusions at pages 13 to 14. The Region agrees with the Draft Report's conclusion that the Region relied on appropriate regulatory requirements and standards in reaching their conclusion that evidence did not exist to commence proceedings to withdraw the authorization of the State of Idaho's authorized hazardous waste program. The Region also agrees that because the evaluation in the Draft Report of IDEQ's hazardous program activities was limited to three units at INFEI, and because INFEI represents only one of all RCRA facilities in the State of Idaho, the evaluators cannot conclude that weaknesses identified in the Draft Report represent material deficiencies in the authorized hazardous waste program in Idaho. The Region did not identify material deficiencies in the authorized hazardous waste program in Idaho after a complete review of the allegations contained in the Petition submitted by Keep Yellowstone Nuclear Free, Environmental Defense Institute, and David B. McCoy. After careful consideration of the Draft Report, the Region does not believe that there is a need for the State to take corrective actions to change its authorized hazardous waste program.

The Inspector General's analysis concludes "that timely permitting decisions are necessary for ensuring hazardous waste is handled in a controlled manner that is protective of human health and the environment." Region 10 agrees with this conclusion and notes that during the informal investigation of the Petition EPA found that IDEQ's permitting performance surpassed the national goal set under the Government Performance and Results Act (GPRA) and surpassed the performance of twenty-six other states. *See* Attachment A of EPA's March 7, 2002 Response to Petition, Summary of Accomplishments. EPA also found that Idaho's financial contribution to the hazardous waste program exceeded the required minimum matching amount by seven times. *See* pages 26 & 27 of EPA's March 7, 2002 Response to Petition. More recently, EPA reviewed the RCRAinfo database on November 14, 2003 to evaluate INEEL permitting progress since EPA's December 6, 2001 analysis. (For the December 6, 2001 analysis, *see* Attachment A of EPA's March 7, 2002 Response to Petition, Idaho Permit Events by Unit Report.) Our review found that the number of permitted units at the INEEL had increased from 25 to 54; the number of certified clean closures had increased from 26 to 42; and the number of units operating under interim status had decreased from 55 to 36. As illustrated by the attached Idaho Permit Events by Unit Report, these permitting successes were the culmination of multiple years of hard work and illustrate that IDEQ's decision to prioritize permitting of units is working.

Recommendations of the Draft Report

The Draft Report provides "Recommendations" at page 14. The Region carefully reviewed each recommendation. The Draft Report recommendations are included below in italics. The Region's response to each recommendation follows the italicized text.

1. *Require that IDEQ timely addresses and resolves RCRA permit application deficiencies for the HLLWE. Specifically, require IDEQ to immediately initiate a followup or enforcement action in response to DOE's failure to comply with the July 30, 1994 NOD for Part B permit application covering the HLLWE. This action should include a compliance schedule for resolving the deficiencies as required by 40 CFR Part 124.*

While the Region agrees that it is appropriate to ensure that IDEQ timely address and resolve RCRA permit application deficiencies, the HLLWE has already been addressed. A schedule already exists for re-submission of this permit application. The Region does not agree that IDEQ must be required to immediately initiate a followup or enforcement action because there is currently no cause for such action to address this issue. Nor, as discussed earlier, does the Region agree that a compliance schedule is required by 40 CFR Part 124.

EPA will identify permitting of the ETS [HLLWE] as a priority in the annual State Grant Workplan. EPA will add a commitment to the State Grant Workplan specifying "submission of a Class 3 Permit Modification Request to add the ETS [HLLWE] within 180 days of the effective date of the Volume 14 partial permit" as a milestone under the grant.

2. *Advise IDEQ that NODs issued to resolve RCRA permit application deficiencies are required under 40 CFR Part 124 to include compliance schedules.*

The Region does not agree that NODs issued to resolve permit application deficiencies are required to include compliance schedules. As discussed earlier, the regulations require that a date be included in the NOD by which information is to be provided. However, the requirement to include a date is not the same as requiring a compliance schedule. At the present time, the authorized hazardous waste program in Idaho requires that a response date be included when issuing a NOD.

Under the currently authorized program, IDEQ is required to include a response date when issuing a NOD. EPA will add the requirement to include a response date when issuing a NOD as a performance measure under the State Grant Workplan which will be reviewed quarterly.

3. *Require that IDEQ inspections at INFEL include evaluations of the PEWE and its associated tanks to determine compliance with 40 CFR Part 265 Subpart AA emissions requirements. In addition, advise IDEQ that inspections at INEEL continue to include evaluations of the ILWMS to determine compliance with waste characterization requirements specified by 40 CFR Part 265.*

The Region will help ensure that the PEWE and the overall ILWMS are operated in compliance with all applicable interim status requirements by making these units a priority in the State Grant Work plan until they are fully permitted.

4. *Verify that Recommendations 1 through 3 have been completely implemented during the Region's next scheduled review of IDEQ's Hazardous Waste Program under the MOA. Require IDEQ to establish a corrective action plan for any recommendations that have not been completely implemented.*

Region 10 will track IDEQ performance, on a quarterly basis, as part of the State Grant Workplan monitoring process.

Region's Conclusion

The Region appreciates the opportunity to review the Draft Evaluation Report. Please contact my staff if you have questions concerning this response to the Draft Evaluation Report. Jeff Hunt in the Office of Waste and Chemicals is the main contact and you can reach him at (206) 553-0256.

Sincerely,



L. John Iani
Regional Administrator

cc:

Michael Owen, Office of Inspector General, Western Audit Division (attachments)
C. Stephen Allred, Administrator, IDEQ (attachments)

Endnotes:

1. Background, Scope, Methodology, and Evaluation Results of the Draft Report – The Draft Report, pages 2-4, explained that the evaluators focused exclusively on a single facility in Idaho,

the Idaho National Environmental and Engineering Laboratory (INEEL). INEEL is a large and complex Department of Energy (DOE) facility and handles a huge volume of the nation's radioactive and mixed waste. This facility is not a common RCRA treatment, storage and disposal facility. The size and complexity of the facility and the waste streams it handles, as well as underlying issues of national security, are relevant to any assessment of how the State of Idaho and the IDEQ address the implementation and enforcement of the authorized program at the facility. While this particular facility is the largest RCRA facility in the State, it is not the only facility. Any evaluation of the authorized hazardous waste program in Idaho needs to be based on implementation and enforcement of the program throughout the State and not at a single facility. The standards against which an authorized program is assessed are found at 40 CFR Part 271.

The Draft Report, pages 4-13, discussed Evaluation Results. The Region believes the detailed research and written analysis provided by the Region fully supported the Region's positions.

2. "Authorization" under RCRA allows a State's regulations which have been reviewed and found to be equivalent to federal regulations, consistent with programs authorized by EPA in other states and not less stringent than federal regulations concerning the same subject matter to "supplant" the federal regulations in that State. Authorized States have independent enforcement authority to enforce State regulations, including State regulations authorized pursuant to RCRA. In authorized States, EPA has independent authority to enforce authorized State regulations and HSWA requirements for which States are not authorized. EPA cannot authorize a State program until the State has developed its own hazardous waste program and that program is found to be equivalent to, consistent with, and not less stringent than, the Federal regulations. States must also have "adequate enforcement authority" in place before they can be authorized.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

January 27, 2004

Reply To
Attn Of: OWC-122

Ms. Carolyn Copper
Director For Program Evaluation: Hazardous Waste Issues
Office of Program Evaluation
United States Environmental Protection Agency
Washington, D.C. 20460

**Re: Revisions to Region 10's November 24, 2003 Response to the Draft Office
of Inspector General Evaluation Report**

Dear Ms. Copper:

Following a meeting on December 11, 2003, with Michael Owen, Madeline Mullen and Phil Weihroch, the Region is providing the following revisions to Region 10's November 24, 2003 response.

Revised Recommendation #3

The Region will require under the State Grant Workplan that IDEQ inspections at the INEEL periodically include evaluations of the ILWMS and its associated units to determine compliance with 40 CFR Part 265 Subpart AA emission requirements. In addition, the Region will advise IDEQ that inspections at INEEL continue to include evaluations of the ILWMS to determine compliance with waste characterization requirements specified by 40 CFR Part 265.

Revised Recommendation #4

Region 10 will track IDEQ performance as part of the State Grant Workplan monitoring process. Currently, both INEEL and IDEQ send Region 10 copies of all relevant permitting correspondence. Region 10 will review this correspondence to ensure that both Recommendations 1 & 2 are met. Region 10 will ensure that Recommendation #3 is met by designating the next inspection of the INEEL ILWMS as an oversight inspection, with a Region 10 EPA inspector participating on the inspection team in an oversight capacity. Region 10 will require IDEQ to establish an action plan for any recommendations that have not been completely implemented.

The Region appreciates the opportunity to discuss these issues. Please contact my staff if you have questions concerning this revision to our response to the Draft Evaluation Report. Jeff Hunt in the Office of Waste and Chemicals is the main contact and you can reach him at (206) 553-0256.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Albright". The signature is fluid and cursive, with the first name "Richard" being more prominent than the last name "Albright".

Richard Albright
Director, Office of Waste and Chemicals

cc:

Michael Owen, Office of Inspector General, Western Audit Division
C. Stephen Allred, Administrator, IDEQ

Appendix E
Idaho Department of Environmental Quality's Response



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
C. Stephen Allred, Director

November 24, 2003

Ms. Carolyn Copper, Director
Office of Program Evaluation (2460 T)
US EPA Office of Inspector General
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

SUBJECT: Office of Inspector General Evaluation Report-Assignment No. 2003-000583

Dear Ms. Copper:

This letter represents the Idaho Department of Environmental Quality's (IDEQ) response to the Office of Inspector General's Evaluation Report, Assignment No. 2003-000583, "Review of EPA's Response to Petition Seeking Withdrawal of Authorization for Idaho's Hazardous Waste Program," (Report) dated October 24, 2003. IDEQ appreciates the opportunity to submit this response to correct any factual errors that may have been included in the sections of the Report and to include comments that may be of assistance in drafting the final report.

GENERAL COMMENTS:

A. The Report deviates from its stated purpose:

As a general comment, IDEQ is concerned with the overall tone and direction of the report in comparison to the stated purpose of the IG's review. The stated purpose of the IG's review "was to determine whether Region 10's response to the September 2001 petition addressed the issues and was supported by documentation." Despite this limited purpose, the Report's conclusions and recommendations go beyond this by making specific findings of shortcomings in the IDEQ program and recommending corrective actions by IDEQ rather than how USEPA should more adequately respond.

An example of this appears at page 9 under the heading, "Compliance Schedule to Resolve Permit Deficiencies for HLLWE Not Established." There, the Report begins by stating: "the petition alleged that a permit application has not been filed for the HLLWE and the unit is not included in the June 2001 Part B application." Rather than noting initially that this allegation was patently false since the HLLWE was included in the Volume 10, 1993 Part B application, the Report launches into an analysis of compliance with the requirements of section 124.3 and criticizes IDEQ's failure to resolve a Notice of Deficiency (NOD) relating to this permit application since then. The Report fails to note that the Department has addressed many of the deficiencies related to the Volume 10 Permit Application other than those related to HLLWE. For instance, the Department resolved deficiencies related to the Flourinel and Fuel Storage Facility (FAST) and issued a partial permit for this unit. The Report fails to note that the LET&D and HLLWE were

ultimately removed from the Volume 10 permit application and will be addressed under Volume 14.

Statements in the Report such as, "our findings support concerns raised by the petitioners related to IDEQ's failure to exercise control in requiring permits," are not consistent with the objective of determining the efficacy of Region 10's response to the petitioners. As well, they are not consistent with the Report's ultimate concurrence with EPA Region 10's decision on the petition. The limited scope of the review make such statements appear to be exaggerations. For instance, the Report's findings regarding non-compliance with 40 CFR § 124.3 are premised on two NODs that were authored in 1991 and 1994 respectively. The Report implies that these historical deviations from regulatory requirements constitute a systemic and ongoing problem within IDEQ. The report, however, notes that more recent permitting actions are in compliance. The Report also notes that the IG otherwise made no review of more recent documentation relating to other units to determine compliance with this issue. To imply by way of its conclusions and recommendations that IDEQ is continuing to deviate from regulatory requirements despite any evidence of such deviation, is not appropriate. The Report should be written to reflect that while there may have been minor deviations from this administrative requirement historically, there should be no suggestion of any ongoing or systemic problems with the IDEQ Authorized Program in the absence of evidence of such.

B. Mischaracterization of IDEQ Decision Making:

Another general comment concerns the characterization of the IDEQ's prioritizing of permitting actions. The Report suggests that IDEQ placed greater importance on other units besides the New Waste Calciner Facility, and reprioritized permitting work subsequent to 1993. While the Report notes the shut-down of the Calciner, it fails to note that IDEQ was informed by USDOE that it might not run the Calciner in the future and might ultimately close the Calciner without further operation. The Report fails to discuss that the Department's decision to cease permitting actions at the Calciner was premised on the non-operation of the unit coupled with doubt as to whether it would ever run again. Instead, the tone of the report suggests that IDEQ simply placed greater priority on other projects. This implication of non-feasance on the part of IDEQ is unsupported and does not reflect the factors weighing upon IDEQ's decision. The Report should be modified to include more details regarding IDEQ's decision to cease permitting activity at the Calciner during the period from 1993 to 1997.

C. Mischaracterization through factual error and omission:

The Department is generally concerned with the implication of the Report that the Department is not diligently pursuing permitting actions at the INEEL or is unable to verify compliance with standards. This implication flows from the Report's factual errors and its omission of factual details.

An example of how this mischaracterization occurs from factual errors occurs at page 13 where the report states:

"IDEQ issued a NOD to DOE on November 20, 2001 requested resolution of the compliance issues identified during the inspection and establishing a compliance schedule. In November 2002, IDEQ established a revised corrective action schedule for the waste characterization and other unresolved deficiencies identified during the inspection through a consent order with DOE. The consent order required resolution of the waste characterization deficiencies within 210 days of DOE's submission of a waste analysis plan to IDEQ. As of July 2003, a waste analysis plan which was acceptable to IDEQ had not been received from DOE."

This paragraph erroneously implies that the DOE has failed to comply with the terms of the 2002 Consent Order, and that Department is not enforcing the terms of a 2002 Consent Order regarding the waste analysis plan. It is factually in error.

First, the Department did not issue an "NOD" as stated by the report. Rather the Department issued an NOV. Further, the NOV did not establish a compliance schedule. Rather, the NOV provided DOE with 15 days within which to request a compliance conference to discuss the violations. This is consistent with IDEQ's Enforcement Response Policy. The result of that compliance conference, and other meetings concerning the NOV was the 2002 Consent Order, which provided that a Waste Analysis Plan was to be submitted to the IDEQ and any issues concerning the submission be resolved within 210 days of its submission. There was never any "revised corrective action schedule" as found by the Report since there was not a "corrective action schedule" to revise. DOE submitted the WAP on April 1, 2003 in compliance with the terms of the Consent Order. IDEQ returned comments to DOE on May 29, 2003. In response to IDEQ's comments, DOE revised and resubmitted the WAP on July 2, 2003. This July 2, 2003 submittal was reviewed and accepted by the Department on August 11, 2003 approximately 133 days after its submission and fully in compliance with the terms of the Consent Order. Because of these factual errors and mischaracterizations, the report erroneously implies the Department did not diligently pursue this issue. Such a conclusion is unsupported by the facts.

The Report further mischaracterizes the Department's actions at INEEL by omitting many relevant facts. The Report focuses solely on inspection reports and permitting documents to conclude or otherwise imply that IDEQ cannot assure compliance with applicable standards under 40 CFR § 265 and is not diligently pursuing permitting. As pointed out more specifically below, this focus solely upon inspection reports and permitting documents ignores the substantial amount of work that goes on outside the context of these regulatory paradigms. For instance the Report fails to note that IDEQ meets with DOE at least quarterly to discuss compliance issues and includes in these meetings resolution of many issues that arise outside the scope of inspections and enforcement actions. The Report also fails to evaluate other regulatory decisions and decision-making tools that inform the Department regarding compliance outside of the inspection process. The report fails to note the ongoing work of IDEQ to assist DOE in developing one-kind sampling methods and protocols to address the unique difficulties of compliance and permitting in a mixed-waste environment. For example, the Report concludes that with respect to the Calciner, the Department failed to diligently resolve deficiencies noted in the 1991 NOD. The Report fails to note the substantial work of DOE and IDEQ during

the period from 1991 through 1997 to resolve risk assessment issues and off-gas sampling methods that were major obstacles to submission of a complete application by DOE. To imply from the absence of an administrative requirement under 40 CFR 124.3 that nothing was done to resolve permitting issues at the Calciner, is a gross oversimplification and mischaracterization of the facts. To imply from the absence of check marks in inspection reports, the absence of compliance with standards, is in error.

SPECIFIC FACTUAL AND LEGAL CORRECTIONS:

1. Background Section, third paragraph.

The report cites that there are 48 regulated units. This number appears to have been taken from an Interim Status Part A application which reflects only those units which have interim status. The actual number of HWMA/RCRA regulated units at the INEEL is more accurately reflected by the EPA national RCRAInfo hazardous waste program data management system. As of October 2003, RCRAInfo identifies 154 units at the INEEL. The 48 Interim Status units reflected in the Part A application are subject to further permitting activities, but do not constitute the only HWMA/RCRA regulated units at the facility.

2. Evaluation Results Section, third bullet.

The Report states that "Data has not been collected to determine whether the PEWE and associated tank systems are in compliance with RCRA emissions standards." This is based upon a review of IDEQ inspection and permitting records from 1996 through 2003. See Report pg. 11. The conclusion however is not supported. First, from 1993 through 1998, DOE advised the IDEQ that the PEWE was a closed-loop, zero emissions unit with no process vents. Thus, Subpart AA was deemed inapplicable and inspections for AA compliance would not have occurred. In 1998, IDEQ became aware through discussions with the Permitting program that the PEWE was not a zero-emissions unit since it had an off-gas vent. The IDEQ at that time required DOE to conduct a review of their process knowledge and input data to confirm compliance with Subpart AA at the PEWE and LET&D combined. IDEQ has since reviewed substantial information in operating records and sampling data that is maintained by the USDOE on-site at the INEEL and has concluded that the air emission standards of Subpart AA 40 CFR § 265.1032(a)(1) are being met. The information provided to IDEQ consisting of process knowledge input data including feedstock sampling and protocols, indicates that organic emissions from the facility can not exceed 3 lbs. per hour or 3.1 tons per year under worst case operating conditions and maximum emissions. Off-gas sampling of the emissions from the facility is not required where emissions can be determined otherwise. This is particularly appropriate where there is no demonstrated ability to conduct off-gas sampling at the units in question. The IDEQ has been instrumental in developing off-gas sampling protocols in conjunction the National Technical Work Group for Mixed Waste, to conduct off-gas sampling designed for mixed waste environments. This includes protocols for sampling the off-gases at the PEWE and LET&D before these gas streams enter the main stack at INEEL where they become diluted. When complete, this off-gas sampling is expected to verify the process data calculations of emissions previously conducted by DOE and IDEQ and compliance with Subpart AA. The Report's focus on

Inspection Records as the sole evidence of compliance leads to its erroneous conclusion. Despite the absence in inspection records, the Department has conducted a review of this issue on several occasions and made a compliance determination regarding this provision. The fact that the Department has requested that DOE provide this information in detail as part of its Part B permit application does not suggest that IDEQ had not previously reviewed this for purposes of determining compliance. DOE is required by 40 CFR § 270 to demonstrate, in the Part B application, compliance with this standard as contained in part 264. The fact that DOE did not include sufficient information in its application as noted by the Department, does not indicate a failure by IDEQ to have separately assured compliance with the standard.

Idaho DEQ would suggest that in the absence of evidence specifically indicating regulatory non-compliance, references to missing data or incomplete regulatory evaluations as supporting the conclusion of non-compliance is fundamentally flawed and should not be included in the IG's report.

3. Evaluation Results, fourth bullet and final section, Compliance with Waste Characterization Requirements at ILWMS Not Verified.

The Report states that "the ILWMS was not evaluated for compliance with waste characterization requirements until July 2001." The basis for this conclusion is the absence of notes in the Inspection reports from 1989 through 2001 regarding compliance with this section, the issuance of an NOV regarding documentation requirements in 2001, and the issuance of NODs regarding DOE's Part B permit application in 2001 and 2002. Like the Report's conclusions respecting subpart AA compliance, the absence of information in these documents does not support the conclusion reached. First, the requirements of 40 CFR § 265.13 are applicable to the owner and operator of the treatment facility. Thus, it is the obligation of the owner or operator to comply. IDEQ's obligation is merely to verify compliance with this. IDEQ is not required to conduct the characterization itself. IDEQ has verified that DOE is in compliance with 40 CFR § 265.13 waste characterization requirements. In 1993 DOE developed as part of its Part A submission a report referred to as the "WINCO-1132 Report" which verified the types and quantities of hazardous wastes being treated at the ILWMS. In 1995, IDEQ approved as part of Volume 4, a site wide waste analysis plan that included wastes in the ILWMS treatment stream. This waste analysis plan was deemed sufficient to indicate compliance with the 265.13 requirement to have sufficient chemical and physical analysis for treatment. Since treatment in the ILWMS consists of evaporation, the IDEQ was satisfied that characterization of the Organic Contaminants was sufficient to show compliance with applicable standards. In 1999 the Gilbert Report verified the wastes entering the PEWE.

The issuance of the NOV in 2001 related to DOE's failure to maintain a waste analysis plan specific to the ILWMS should not be seen as an indication that waste characterization under 40 CFR § 265.13 was insufficient. Rather, this relates to administrative/record-keeping requirements. Finally, the issuance of the NODs related to the part B application is irrelevant to compliance with section 265.13. The requirements of part 264 waste analysis and characterization are different than those

Letter to C. Copper
November 24, 2003
Page 6

contained in part 265. Accordingly, the NODs are not indicative of a violation of section 265 requirements.

CONCLUSION:

In conclusion, IDEQ would suggest to the Inspector General that in completing the final report on assignment number 2003-000583, it should:

- (1) Adhere to the objective of the report which was "to determine whether Region 10's response to the September 2001 petition addressed the issues and was supported by documentation;"
- (2) Review its fundamental understanding of compliance with requirements of 40 CFR Part 265 versus 264;
- (3) Refrain from making conclusions about IDEQ's ability to assure compliance from the absence of inspection records, when this does not constitute the sole source of compliance information available to the Department; and;
- (4) Provide more factual details concerning IDEQ's permitting and compliance activities so that the agency's actions are not mischaracterized by omission.

Further, the Department believes the report should note the fact that deviations from the requirements of 40 CFR 124.3 noted are historic in nature and that there does not appear to be a systemic failure on the part of IDEQ at present or in the past to diligently pursue permitting actions at the INEEL.

The Report should also reemphasize its concurrence with EPA Region 10's conclusion to deny the Petition. The Report finds no fault with this determination which was the subject of this audit. The decision by EPA Region 10 is supported by facts and the record and should not be undermined or questioned by the erroneous implications of this Report.

The IDEQ committed significant resources in support of the IG's review. This commitment involved nearly 500 hours of staff time, costing the IDEQ more than \$13,000.

If you have any questions on the contents of this letter or would like further clarification, please contact Brian R. Monson, Idaho DEQ Hazardous Waste Program Manager at (208) 373-0490.

Sincerely,



Stephen Alfred
Director

Appendix F

Distribution

EPA Headquarters Offices

Assistant Administrator, Office of Solid Waste and Emergency Response (5103T)
Assistant Administrator, Office of Enforcement and Compliance Assurance (2201A)
Director, Office of Solid Waste (5301W)
Director, Federal Facilities and Restoration and Reuse Office (5106G)
Director, Federal Facilities Enforcement Office (2261A)
Comptroller (2731A)
Agency Followup Official (2710A)
Agency Followup Coordinator (2724A)
Associate Administrator for Congressional and Intergovernmental Relations (1301A)
Associate Administrator for Public Affairs (1701A)

EPA Region 10

Regional Administrator, Region 10 (RA-140)
Director, Office Waste and Chemicals Management (WCM-127)
Audit Follow-up Coordinator, Region 10 (OPM-145)
Public Affairs Office, Region 10 (CEC-142)

EPA Office of Inspector General

Inspector General (2410)