

D. Collins (R11)
J. Pelchat (R11)
F. Wombs
G. Pangburn (R1)
J. Myers

From: Kevin M. Ramsey (KMR)
To: DMC, JMP2, FCC, GCP, JHM
Date: Wednesday, October 6, 1993 4:22 pm
Subject: Radioactive Pipe Scale in WV - Update

30-06652
47-00260-02

According to Liz O'Finan at Union Carbide (South Charleston, WV), they have received the characterization report from Chase Environmental (Louisville, KY) and it concludes that the contamination in the pipe scale is NORM (primary isotope is Ra-226). I advised Ms. O'Finan that NRC had no jurisdiction over NORM but they should keep West Virginia and EPA advised of their disposal plans. Since the pipe was already rejected by a scrap yard, Union Carbide is considering disposal as LLW at Hanford, WA or shipping the pipe to SEG's metal melt facility. SEG apparently has a licensed facility that melts down slightly contaminated metal, separates the contamination, and recycles the metal.

I believe we can close out this report.

A-108

CONVERSATION RECORD

TIME

11:30 am

DATE

10/6/93

TYPE

☐ VISIT

☐ CONFERENCE

☒ TELEPHONE

☒ INCOMING

☐ OUTGOING

ROUTING

NAME/SYMBOL

INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

ORGANIZATION (Office, dept., bureau, etc.)

TELEPHONE NO.

Liz O'Finan, Union Carbide, South Charleston, WV

SUBJECT

Results of Isotopic Analysis of Contaminated Pipe Scale.

SUMMARY

Had conference call with Liz O'Finan (Union Carbide) and Steve Marshall (Chase Environmental). Chase Environmental was the contractor that characterized the pipe scale. The report found that contamination was NORM and the primary isotope was Ra-226. Highest concentration of Ra-226 was 800-900 picocuries/gm. Highest total activity was just under 2000 picocuries/gm. (This is very close to exceeding the Dept. of Transportation definition of radioactive material.)

Since a scrap yard already rejected the pipe, Union Carbide is considering shipping the material to Richland, WA for burial as LLW or shipping it to SEG. SEG has a licensed metal melt facility where they try to separate the metal from the contamination and recycle the metal. I told Ms. O'Finan that NRC had no jurisdiction over NORM, but she should keep West Virginia and EPA informed of their intentions for disposal.

ACTION REQUIRED

→ No further action required by NRC.

NAME OF PERSON DOCUMENTING CONVERSATION

SIGNATURE

DATE

Kevin Ramsey, IMOB

Kevin M Ramsey

10/6/93.

ACTION TAKEN

SIGNATURE

TITLE

DATE

From: Kevin M. Ramsey (KMR)
To: DMC, FCC, GCP, JHM, JMP2
Date: Thursday, July 22, 1993 2:28 pm
Subject: Radioactive Pipe Scale in WV - Update

According to Liz O'Finan at Union Carbide (South Charleston, WV), they hired Chase Environmental (Louisville, KY) to characterize the radioactive scale in their pipe. The contractor was onsite about a week ago to take samples and photographs. Ms. O'Finan expects a 2 - 3 week turnaround time for the sample analysis. She will contact us after they have a chance to review the analysis results.

From: Kevin M. Ramsey (KMR)
To: DMC, FCC, JHM, GCP, JMP2
Date: Monday, June 7, 1993 3:35 pm
Subject: Radioactive Pipe Scale in WV - Update

According to Liz O'Finan at Union Carbide (South Charleston, WV), they are still trying to finalize arrangements to sample the pipe scale and get an isotopic analysis. They hope to contract with U.S. Ecology or Chem-Nuclear this week.

304 - 747 - 2987

From: Kevin M. Ramsey (KMR)
To: DMC, FCC, JHM, GCP, JMP2
Date: Friday, May 7, 1993 3:30 pm
Subject: Radioactive Pipe Scale in WV - Update

I was called by Liz O'Finan who identified herself as the client that Rebecca Robertson had been working for. She is with Union Carbide in South Charleston, WV. She clarified that the contaminated piping includes small sections such as heat exchanger coils. The 6000 pound estimate is the TOTAL weight of the piping. The weight of the scale has not been estimated, but should be a small fraction of the total weight.

The initial analysis of 23.5 picocuries/gram was performed by Halliburton NUS. Union Carbide has been talking to U.S. Ecology about characterizing and disposing of the piping. They have recommended shipment to Richland, WA if burial is required. I pointed out that U.S. Ecology operates the burial sites at Richland, WA and Beatty, NV, and Chem-Nuclear operates the only other burial site in Barnwell, SC. Ms. O'Finan said she would probably call Chem-Nuclear also. They have not contracted with anyone to characterize the contamination yet. She assured me that they will have the contamination characterized and inform us of the results. Her phone number is (304) 747-2987.

Our records show that Union Carbide Chemicals and Plastics in South Charleston, WV holds a Type A Broad Scope R&D license number 47-00260-02 (Docket 030-06652).

*6/7/93 - Still trying to finalize arrangement to take samples
of pipe scale and have it analyzed. Hope to contract
with USE or Chem-Nuclear this week.*

CONVERSATION RECORD

TIME

~ 2 pm

DATE

5/7/93

TYPE

☐ VISIT

☐ CONFERENCE

☒ TELEPHONE

☒ INCOMING

☐ OUTGOING

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

LIZ O'Finan

ORGANIZATION (Office, dept., bureau, etc.)

Union Carbide

TELEPHONE NO.

(304)
747-2987

SUBJECT

PIPING WITH RADIOACTIVE PIPE SCALE

ROUTING

NAME/SYMBOL

INT

SUMMARY

LIZ O'Finan called to tell me that she was the client that Rebecca Robertson had ~~ref~~ referred to. She is with Union Carbide in South Charleston, WV. The contaminated piping is from a brine cooling system that includes small sections such as heat exchanger coils. The 6000 pound estimate is the TOTAL weight of the piping and scale. The weight of the scale alone has not been estimated, but should be a small fraction of that. The initial analysis of 23.5 picocuries/gram was performed by Halliburton NUS. Union Carbide has been talking to U.S. Ecology about characterizing and disposing of the pipe. When Ms. O'Finan mentioned that U.S. Ecology recommended shipment to Richland, WA if burial was required, I mentioned that U.S. Ecology operated the burial sites in Richland and Beatty, and Chem-Nuclear operated the site in Barnwell, SC. She said she would probably talk to Chem-Nuclear. Ms O'Finan assured me she would act as point-of-contact and keep us informed.

ACTION REQUIRED

Check on status of characterization in 1-2 weeks.

NAME OF PERSON DOCUMENTING CONVERSATION

Kevin Ramsey

SIGNATURE

Kevin M Ramsey

DATE

5/7/93

ACTION TAKEN

SIGNATURE

TITLE

DATE

CONVERSATION RECORD

TIME

~10 am

DATE

5/7/93

TYPE

☐ VISIT

☐ CONFERENCE

☒ TELEPHONE

☒ INCOMING

☐ OUTGOING

ROUTING

NAME/SYMBOL

INT

GPangburn

FCombs

JPelchat

DCollins

JMyers

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

Rebecca Robertson

ORGANIZATION (Office, dept., bureau, etc.)

ERM Midwest

TELEPHONE NO.

(304)

341-5623

(pager)

SUBJECT

Identity of Client who has Pipe with Radioactive Scale.

SUMMARY

I paged Ms. Robertson to determine if she could identify the identity of the chemical plant in WV with the contaminated pipe. She said she was not authorized to give me that information. Further discussion revealed that Ms. Robertson is no longer working with the client on this issue. Their consulting firm was only contracted to obtain information and provide a recommendation, and that has been completed.

Ms. Robertson could not assure me that they would be able to provide us with the analysis results or act as point-of-contact in the future. I informed Ms. Robertson that we needed to followup on this potential radiation hazard and I would consult my management on how we would proceed. Ms. Robertson said she would forward our concern.

ACTION REQUIRED

Identify point of contact for chemical plant and followup on results of isotopic analysis and disposition of pipe.

NAME OF PERSON DOCUMENTING CONVERSATION

Kevin Ramsey, IMOB

SIGNATURE

Kevin M Ramsey

DATE

5/7/93

ACTION TAKEN

SIGNATURE

TITLE

DATE

From: Kevin M. Ramsey (KMR)
To: FCC, GCP
Date: Monday, May 3, 1993 11:58 am
Subject: Radioactive Pipe Scale

I talked with John Pelchat, RII. He checked and there are no inspectors in West Virginia this week. In any case, they would prefer to wait and see what the lab results are.

Print malfunction

I talked to Rebecca Robertson, ERM Midwest, again and apparently my first rabove estimate for the scale or the 23.5 microcurie activity analysis. They have located some laboratories that can do an isotopic analysis and they hope to have a sample shipped to a lab this week. Lab results may take a couple of weeks. Ms. Robertson did not want to give me the name and address of her client until she checked with the client. She promised to call me back this afternoon.

CC: SWM, JMP2

10 am 5/7/93 - Rebecca Robertson, ERM Midwest

- did not get clearance to provide name & address of client
- They are not coordinating analysis or disposal. They were only requested to provide information and recommendation & that has been finished.

ERM Midwest - contaminated pipe (scrap metal)

5/3/93 - Called John Pelchat, RII back and asked
10:30am about having someone stop at the site. He checked with Chuck Hosey and no inspectors are in West Virginia this week. They would prefer to wait and see what the analysis results are.

Rebecca Robertson, ERM Midwest - 304-776-5414 (office)
304-341-5623 (pager)

John Pelchat, RII - 404-331-5083

P.S. - Pelchat said Eddie Fuente, Mississippi State Program may have information on how they handled radioactive pipe scale in Mississippi. His number is (601) 354-6657. Could also talk to Robert Bell at (601) 354-6657.

5/3/93 - Rebecca Robertson, ERM Midwest, returned my call.
11:00am She said they had located some laboratories who could do an isotopic analysis and hoped to contract with one this week. Could take a couple of weeks to get the lab results. Her client has been instructed not to move the pipe. She is not very confident in the 6000 lb. estimate for the pipe scale and will try to confirm it. I asked for the name and address of her client in case we had an inspector in the area. She said she would have to check with the client before releasing the name. She will call me back this afternoon. Pipe is not from a gas well. It was part of a brine cooling system in a chemical plant.

CONVERSATION RECORD

TIME

11:30 am

DATE

4/29/93

TYPE

☐ VISIT

☐ CONFERENCE

☒ TELEPHONE

☐ INCOMING

☒ OUTGOING

Location of Visit/Conference:

304-776-5414

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

Rebecca Robertson

ORGANIZATION (Office, dept., bureau, etc.)

ERM Midwest

TELEPHONE NO.

(304)
341-5623
(pager)

ROUTING

NAME/SYMBOL

INT

FCombs

JPelchat

DCollins

RZ

RZ

SUBJECT

DISPOSAL OF PIPE WITH RADIOACTIVE

SCALE ON INTERIOR SURFACE

SUMMARY

I RETURNED CALL THAT MS. ROBERTSON ORIGINALLY MADE TO JOHN PELCHAT, RII. MS. ROBERTSON IS A CONSULTANT FOR A ~~BRINE~~ CLIENT IN WEST VIRGINIA THAT HAD PIPE FROM A BRINE OPERATION (NATURAL GAS WELLS) REJECTED BY A SCRAP YARD BECAUSE OF RADIOACTIVITY. ANALYSIS OF PIPE SCALE WAS DONE LAST YEAR AND RESULTS WERE 23.5 MICROCURIES/GRAM NATURAL U/NATURAL TH/DAUGHTERS. THEY ESTIMATE THAT THEY HAVE APPROX. 6000 LBS. OF SCALE, BUT THEY DON'T KNOW THE SPECIFIC ISOTOPES. I TOLD MS. ROBERTSON THAT SHE NEEDED TO GET AN ISOTOPIC ANALYSIS BEFORE WE COULD DETERMINE THE DISPOSAL REQUIREMENTS OR LICENSING REQUIREMENTS.

$$23.5 \mu\text{Ci} / \text{gram} \left(\frac{454 \text{ grams}}{\text{lbs}} \right) (6000 \text{ lbs}) = 6.4 \times 10^6 \mu\text{Ci} \text{ or } 6.4 \text{ curies of something}$$

ACTION REQUIRED

NEED TO DETERMINE WHAT RADIOACTIVE MATERIAL THEY HAVE AND VERIFY THAT IT IS UNDER CONTROL.

NAME OF PERSON DOCUMENTING CONVERSATION

KEVIN M. RAMSEY, NMSS

SIGNATURE

Kevin M Ramsey

DATE

4/29/93

ACTION TAKEN

SIGNATURE

TITLE

DATE